



City of Tacoma
Environmental Services Department
TPU – Water Department

SPECIFICATION NO. ES21-0547F

**WW SEWER REPLACEMENT
SOUTH J STREET
S J St Between S 13th & S 7th
and I St Between S 7th &
Division**

Project No. ENV-04024-04, ENV-03032-01, WTR-00641-02

CITY OF TACOMA
ENVIRONMENTAL SERVICES DEPARTMENT
TPU – WATER DEPARTMENT

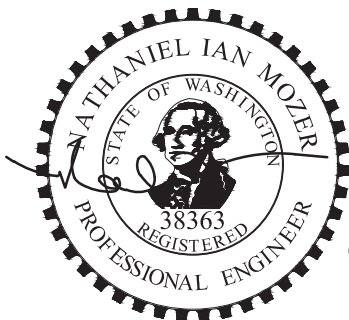
REQUEST FOR BIDS, SPECIAL PROVISIONS, BID PROPOSAL AND CONTRACT

FOR

SPECIFICATION NO.
ES21-0547F

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9/15/2021

Nathan Mozer, P.E.
KPG, P.S.

2502 Jefferson Avenue
Tacoma, Washington 98403

SPECIFICATION NO. ES21-0547F

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City of Tacoma
Environmental Services Department
TPU – Water Department

REQUEST FOR BIDS ES21-0547F
WW SEWER REPLACEMENT SOUTH J STREET
S J St Between S 13th & S 7th and I St Between S 7th & Division

Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday, October 5, 2021

Submittals must be received by the City's Procurement and Payables Division prior to 11:00 a.m. Pacific Time.

For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email, bids@cityoftacoma.org, as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals.

Submittal Delivery: Sealed submittals will be received as follows:

By Email: bids@cityoftacoma.org Maximum file size: 35 MB. Multiple emails may be sent for each submittal
By Carrier: If possible, please include a flash drive of your full submittal. City of Tacoma Procurement & Payables Division Tacoma Public Utilities 3628 S 35 th Street Tacoma, WA 98409
In Person: If possible, please include a flash drive of your full submittal. City of Tacoma Procurement & Payables Division Tacoma Public Utilities Administration Building North Guard House (east side of main building) 3628 S 35 th Street Tacoma, WA 98409
By Mail: If possible, please include a flash drive of your full submittal. City of Tacoma Procurement & Payables Division Tacoma Public Utilities PO Box 11007 Tacoma, WA 98411-0007

Bid Opening: Held virtually each Tuesday at 11AM. Attend [via this link](#) or call 1 (253) 215 8782.

Submittals in response to a RFB will be recorded as received. As soon as possible on the day of submittal deadline, preliminary results will be posted to www.TacomaPurchasing.org.

Solicitation Documents: An electronic copy of the complete solicitation documents may be viewed and obtained at the City's plan distribution service provider, ARC, 632 Broadway, Tacoma, WA, or by going to <http://www.e-arc.com/location/tacoma>. Prospective bidders will be required to pay reproduction costs. A list of vendors registered for this solicitation is also available at their website.

Pre-Proposal Meeting: A pre-proposal meeting will be held via conference call at 10:00 A.M. September 27, 2021. The phone number is 1 (888) 850-4523 and the access code is 544766. This conference call will answer questions regarding the Equity in Contracting Program (EIC) and Local Employment and Apprenticeship Training Program (LEAP) requirements included in the Contract. Prospective bidders are urged to call in.

Project Scope: This contract shall generally consist of constructing approximately 750 feet of 6-inch to 12-inch storm sewer main, 4500 feet of 8-inch to 18-inch sanitary sewer main, and 2500 feet of 6-inch to 12-inch potable water main. Work will also include new sanitary sewer laterals, new water services, and pavement restoration.

Estimate: \$3.0 Million to \$3.7 Million

Paid Sick Leave: The City of Tacoma requires all employers to provide paid sick leave as set forth in Title 18 of the Tacoma Municipal Code. For more information, visit [our Minimum Employment Standards Paid Sick Leave webpage](#).

Americans with Disabilities Act (ADA Information): The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. Specification materials can be made available in an alternate format by emailing Gail Himes at ghimes@cityoftacoma.org, or by calling her collect at 253-591-5785.

Title VI Information: "The City of Tacoma" in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

Additional Information: Requests for information regarding the specifications may be obtained by contacting Doreen Klaaskate, Senior Buyer by email to dklaaskate@cityoftacoma.org.

Protest Policy: City of Tacoma protest policy, located at www.tacomapurchasing.org, specifies procedures for protests submitted prior to and after submittal deadline.



Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.

SPECIAL REMINDER TO ALL BIDDERS

HEALTH & SAFETY: Be sure to comply with all City of Tacoma health and safety requirements.

1. This project has been deemed to be an essential project by the City of Tacoma and it is anticipated that the contract will be operational during the COVID-19 outbreak. Therefore the contractor shall complete a health and safety plan describing how the contractor will complete the work while combating the COVID-19 spread (social distancing practices) and what Personal Protective Equipment (PPE) will be in place.

PLEASE NOTE: Be sure you have complied with all specifications and requirements and have signed all required documents.

YOUR ATTENTION IS PARTICULARLY CALLED to the following forms, which must be executed in full before the bid is submitted:

1. **BID PROPOSAL:** The unit prices bid must be shown in the space provided. Check your computations for omissions and errors.
2. **SIGNATURE PAGE:** To be filled in and executed by a duly authorized officer or representative of the bidding entity. If the bidder is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.
3. **BID BOND:** The Bid Bond must be executed by the person legally authorized to sign the bid, and must be properly signed by the representatives of the surety company unless the bid is accompanied by a certified check. If Bid Bond is furnished, the form furnished by the City must be followed; no variations from the language thereof will be accepted. The amount of the Bid Bond must be not less than 5% of the total amount bid.
4. **CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES:** Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2017).
5. **STATE RESPONSIBILITY AND RECIPROCAL BID PREFERENCE INFORMATION:** Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2010).
6. **LIST OF SUBCONTRACTOR CATEGORIES OF WORK:** Bidder shall list all subcontractor(s) proposed to perform the work of heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW.

FAILURE TO LIST SUBCONTRACTORS WILL RESULT IN THE BID BEING NON-RESPONSIVE AND THEREFORE VOID.

7. **EQUITY IN CONTRACTING (EIC) UTILIZATION FORM**

Bidders shall complete the Equity in Contracting Utilization Form in accordance with the City of Tacoma Equity in Contracting Regulations Manual and Chapter 1.07 of the City of Tacoma Municipal Code (TMC). This form shall be fully and accurately completed and

returned with submission of the Bid and will be used to determine if the Bidder is in compliance with the EIC regulations and the TMC.

Bidders shall meet the percent sub-contracting requirements listed on the EIC Requirement Form to be considered responsive. Bidders unable to meet the percent sub-contracting requirements shall submit an Application of Waiver of EIC Requirements, the Equity in Contracting Utilization Form, and any required attachments with the Bid in accordance with the Equity in Contracting Regulations Manual located in PART III of these Specifications.

FAILURE TO COMPLETE AND SUBMIT EIC FORMS WITH THE BID SUBMITTAL PACKAGE MAY RESULT IN THE BID BEING DECLARED NON-RESPONSIVE AND REJECTED.

POST AWARD FORMS EXECUTED UPON AWARD:

- A. CONTRACT: Must be executed by the successful bidder.
- B. PAYMENT BOND TO THE CITY OF TACOMA: Must be executed by the successful bidder and his/her surety company.
- C. PERFORMANCE BOND TO THE CITY OF TACOMA: Must be executed by the successful bidder and his/her surety company.
- D. CERTIFICATE OF INSURANCE: Shall be submitted with all required endorsements.
- E. LEAP UTILIZATION PLAN: Shall be submitted at the Pre-Construction Meeting.
- F. GENERAL RELEASE.
- G. LANDSCAPE WARRANTY AND DEFECT BOND TO CITY OF TACOMA.

CODE OF ETHICS: The successful bidder agrees that its violation of the City's Code of Ethics contained in TMC Chapter 1.46 shall constitute a breach of the contract subjecting the contract to termination.

LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP):

The Local Employment and Apprenticeship Training Program (LEAP) has been adopted to counteract economic and social ills, which accompany high rates of unemployment within the City of Tacoma. The Tacoma City Council established the mandatory LEAP program for public works contracts pursuant to Ordinance No. 28520. The primary goal is to provide an opportunity for City of Tacoma residents and Tacoma Public Utilities ratepayers to enter apprenticeship programs, acquire skills, and perform work that will provide living wages.

LEAP Goals:

1. Local Employment Utilization Goal – Prime contractor is required to ensure that 15 percent of the labor hours worked on the project are performed by residents of the City of Tacoma or economically distressed areas of the Tacoma Public Utilities service area.

2. Apprentice Utilization Goal - Prime contractor is required to ensure that 15 percent of the labor hours worked on the project are performed by apprentices who reside in the Tacoma Public Utilities service area.

NOTE: The two goals can be satisfied concurrently if the prime contractor utilizes individuals who simultaneously meet the requirements of both goals, such as an apprentice who resides in an economically distressed area of the Tacoma Public Utilities service area.

**CITY OF TACOMA
FINANCE/PURCHASING DIVISION
SPECIAL NOTICE TO BIDDERS**

Public works and improvement projects for the City of Tacoma are subject to Washington state law and Tacoma Municipal Code, including, but not limited to the following:

I. STATE OF WASHINGTON

A. RESPONSIBILITY CRITERIA – STATE OF WASHINGTON

In order to be considered a responsible bidder the bidder must meet the following mandatory state responsibility criteria contained in RCW 39.04.350:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect **at the time of bid submittal**;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. If applicable:
 - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - b. Have a Washington Employment Security Department number, as required in Title 50 RCW;
 - c. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW and;
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).
5. Have received training on the requirements related to public works and prevailing wage under this chapter and chapter 39.12 RCW and must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection.

B. RECIPROCAL PREFERENCE FOR RESIDENT CONTRACTORS:

Effective March 30, 2012, RCW 39.04.380 imposes a reciprocal preference for resident contractors. Any bid received from a non-resident contractor from a state that provides an in-state percentage bidding preference is subject application of a comparable percentage disadvantage.

A non-resident contractor from a state that provides an in-state percentage bidding preference means a contractor that:

1. Is from a state that provides a percentage bid preference to its resident contractors bidding on public works projects, and
2. Does not have a physical office located in Washington at the time of bidding on the City of Tacoma public works project.

The state of residence for a non-resident contractor is the state in which the contractor was incorporated, or if not a corporation, the state in which the contractor's business entity was formed.

The City of Tacoma will evaluate all non-resident contractors for an out of state bidder preference. If the state of the non-resident contractor provides an in state contractor preference, a comparable percentage disadvantage will be applied to the non-resident contractor's bid prior to contract award. The responsive and lowest and best responsible bidder after application of any non-resident disadvantage will be awarded the contract.

The reciprocal preference evaluation does not apply to public works procured pursuant to RCW 39.04.155, RCW 39.04.280, federally funded competitive solicitations where such agencies prohibit the application of bid preferences, or any other procurement exempt from competitive bidding.

Bidders must provide the City of Tacoma with their state of incorporation or the state in which the business entity was formed and include whether the bidder has a physical office located in Washington.

The bidder shall submit documentation demonstrating compliance with above criteria on the enclosed State Responsibility and Reciprocal Bidder Information form.

C. SUBCONTRACTOR RESPONSIBILITY

1. The Contractor shall include the language of this subcontractor responsibility section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. The requirements of this section apply to all subcontractors regardless of tier.
2. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:
 - a. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
 - b. Have a current Washington Unified Business Identifier (UBI) number;
 - c. If applicable, have:
 - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - b. A Washington Employment Security Department number, as required in Title 50 RCW;
 - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - d. An electrical contractor license, if required by Chapter 19.28 RCW;
 - e. An elevator contractor license, if required by Chapter 70.87 RCW and;
3. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).

II. CITY OF TACOMA

A. SUPPLEMENTAL RESPONSIBILITY CRITERIA – CITY OF TACOMA:

In order to be considered a responsible bidder, the prospective bidder shall have all of the following qualifications set forth in Tacoma Municipal Code 1.06.262:

1. Adequate financial resources or the ability to secure such resources;
2. The necessary experience, stability, organization and technical qualifications to perform the proposed contract;
3. The ability to comply with the required performance schedule, taking into consideration all existing business commitments;
4. A satisfactory record of performance, integrity, judgment and skills; and
5. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.
 - a. Bidder Responsibility. Bidders shall not be in violation of 39.04.350 RCW Bidder Responsibility Criteria - Supplemental Criteria.

In addition to the mandatory bidder responsibility criteria listed immediately above, the City may, in addition to price, consider any or all of the following criteria contained in Tacoma Municipal Code Chapter 1.06.262 in determining bidder responsibility:

1. The ability, capacity, experience, stability, technical qualifications and skill of the respondent to perform the contract;
2. Whether the respondent can perform the contract within the time specified, without delay or interference;
3. Integrity, reputation, character, judgment, experience, and efficiency of the respondents, including past compliance with the City's Ethics Code;
4. Quality of performance of previous contracts;
5. Previous and existing compliance with laws and ordinances relating to contracts or services;
6. Sufficiency of the respondent's financial resources;
7. Quality, availability, and adaptability of the supplies, purchased services or public works to the particular use required;
8. Ability of the respondent to provide future maintenance and service on a timely basis;
9. Payment terms and prompt pay discounts;
10. The number and scope of conditions attached to the submittal;
11. Compliance with all applicable City requirements, including but not limited to the City's Ethics Code and its Small Business Enterprise and Local Employment and Apprenticeship programs;
12. Other qualification criteria set forth in the specification or advertisement that the appropriate department or division head determines to be in the best interests of the City.

The City may require bidders to furnish information, sworn or certified to be true, to demonstrate compliance with the City responsibility criteria set forth above. If the city manager or director of utilities is not satisfied with the sufficiency of the information provided, or if the prospective respondent does not substantially meet all responsibility requirements, any submittal from such respondent must be disregarded.

B. ADDITIONAL SUPPLEMENTAL CRITERIA – NOT APPLICABLE

C. MODIFICATIONS TO SUPPLEMENTAL CRITERIA

Potential bidders may request modifications to the City's **supplemental criteria** by submitting a written request to the Purchasing Division via email to bids@cityoftacoma.org no later than 5:00 p.m. Pacific Time, three days prior to the submittal deadline. Please include the Specification No. and Title when submitting such requests. Requests must include justification for why certain criteria should be modified. Requests received after this date and time will not be considered.

The City will respond to a timely submitted request prior to the bid opening date. Changes to the supplemental criteria, if warranted, will be issued by addendum to the solicitation documents and posted to the City's website for the attention of all prospective bidders.

D. DETERMINATION OF BIDDER RESPONSIBILITY

If the City determines the bidder does not meet the criteria above and is therefore not a responsible bidder, the City shall notify the bidder in writing with the reasons for its determination. If the bidder disagrees, the bidder may appeal the determination in a manner consistent with the City's Protest Policy. Appeals are coordinated by the Purchasing Division heard by the Procurement and Payables Division manager for contracts less than or equal to \$500,000 and by Contracts and Awards Board for contracts greater than \$500,000.

PART I

BID PROPOSAL AND CONTRACT FORMS

BID PROPOSAL

Specification No. ES21-0547F

2020 Wastewater Sewer Replacement South J ST

The undersigned hereby certifies that he/she has examined the location and construction details of work as outlined on the Plans and Specifications for Projects No. ENV-04024-04, ENV-03032-01, and WTR-00641-02 and has read and thoroughly understands the Plans and Specifications and contract governing the work embraced in this improvement and the method by which payment will be made for said work, and hereby proposes to undertake and complete the work embraced in this improvement in accordance with said Plans, Specifications and contract and at the following schedule of rates and prices:

- NOTE: 1. Unit prices of all items, all extensions and total amount of bid should be shown. Show unit prices in figures only.
2. The notations below the item numbers refer to the specification section where information may be found regarding each contract item. These notations are intended only as a guide and are not warranted to refer to all specification sections where information may be found.
3. Washington State Department of Revenue Rules 170 and 171 shall apply as shown in the Proposal and per Section 1-07.2 of the WSDOT State Amendments to the Standard Specifications. **Items marked with a * signifies both rules may apply.**

SCHEDULE A: ROADWAY IMPROVEMENTS (Rule 171)

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
R1 1-05 SP	Project Redline Drawings	1 LS	<u>LUMP SUM</u>	<u>\$</u>
R2 1-07 SP	SPCC Plan	1 LS	<u>LUMP SUM</u>	<u>\$</u>
R3 1-09 SS	Mobilization	1 LS	<u>LUMP SUM</u>	<u>\$</u>
R4 1-10 SP	Project Temporary Traffic Control	1 LS	<u>LUMP SUM</u>	<u>\$</u>
R5 1-10 SP	Uniformed Police Officer for Traffic Control	160 HR	<u>\$</u>	<u>\$</u>
R6 8-01 SP	Stormwater Pollution Prevention Plan (SWPPP)	1 LS	<u>LUMP SUM</u>	<u>\$</u>
R7 8-01 SP	NPDES Construction Stormwater General Permit	1 LS	<u>LUMP SUM</u>	<u>\$</u>
R8 8-01 SS	Erosion/Water Pollution Control	1 FA	<u>\$ 15,000.00</u>	<u>\$ 15,000.00</u>
R9 8-01 SS	Inlet Protection	49 EA	<u>\$</u>	<u>\$</u>
R10 8-01 SS	Street Cleaning	80 HR	<u>\$</u>	<u>\$</u>
R11 8-09 SS	Raised Pavement Marker Type 1Y	4.8 HUND	<u>\$</u>	<u>\$</u>

Contractor's Name: _____

Specification No. ES21-0547F

SCHEDULE A: ROADWAY IMPROVEMENTS (Rule 171)

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
R12 8-09 SS	Raised Pavement Marker Type 2YY	0.6 HUND	\$ _____	\$ _____
R13 8-21 SS	Permanent Signing	1 LS	<u>LUMP SUM</u>	\$ _____
R14 8-22 SS	Paint Line	1,977 LF	\$ _____	\$ _____
R15 8-22 SS	Painted Wide Lane Line	13 LF	\$ _____	\$ _____
R16 8-22 SS	Plastic Crosswalk Line	150 SF	\$ _____	\$ _____
R17 8-22 SS	Plastic Stop Line	33 LF	\$ _____	\$ _____
R18 8-22 SS	Painted Traffic Letter	9 EA	\$ _____	\$ _____

Contractor's Name: _____

Specification No. ES21-0547F

SCHEDULE B: STORM SEWER IMPROVEMENTS (Rule 171)

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
S1 2-02 SS	Removal of Structures and Obstructions	1 LS	<u>LUMP SUM</u>	<u>\$</u>
S2 2-09 SP	Structure Excavation Class B	290 CY	<u>\$</u>	<u>\$</u>
S3 2-09 SS	Shoring or Extra Excavation Class B	1,100 SF	<u>\$</u>	<u>\$</u>
S4 2-14 SP	Remove Existing Pavement, Type II Class A6	20 SY	<u>\$</u>	<u>\$</u>
S5 2-14 SP	Remove Existing Pavement, Type II Class CA	580 SY	<u>\$</u>	<u>\$</u>
S6 2-14 SP	Remove Existing Pavement, Type II Class C6	20 SY	<u>\$</u>	<u>\$</u>
S7 2-14 SP	Remove Existing Pavement, Type II Class C12	60 SY	<u>\$</u>	<u>\$</u>
S8 2-15 SP	Remove Curb and Gutter	60 LF	<u>\$</u>	<u>\$</u>
S9 2-16 SP	Remove Manhole	2 EA	<u>\$</u>	<u>\$</u>
S10 4-04 SP	Crushed Surfacing Top Course	20 TN	<u>\$</u>	<u>\$</u>
S11 4-04 SP	Recycled Concrete Aggregate	210 CY	<u>\$</u>	<u>\$</u>
S12 5-04 SP	Temporary HMA Class ½" PG58-22, 3-Inch Minimum Depth, Installed & Removed	330 SY	<u>\$</u>	<u>\$</u>
S13 5-04 SP	HMA Cl. 1/2 In. PG 58H-22 for Pavement Patch	110 TN	<u>\$</u>	<u>\$</u>
S14 7-05 SP	Catch Basin Type 1	3 EA	<u>\$</u>	<u>\$</u>
S15 7-05 SP	Manhole 48 In. Diam. Type 1	3 EA	<u>\$</u>	<u>\$</u>
S16 7-05 SP	Manhole 48 In. Diam. Type 3	3 EA	<u>\$</u>	<u>\$</u>
S17 7-05 SP	Conversion Riser	2 EA	<u>\$</u>	<u>\$</u>
S18 7-05 SP	Connect New Storm Sewer Pipe 12-In. Diam. to Existing Structure	8 EA	<u>\$</u>	<u>\$</u>

Contractor's Name: _____

Specification No. ES21-0547F

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
S19 7-05 SP	Reconnect Existing Sewer Pipe, 6-In. Diam., to New Structure	1 EA	\$ _____	\$ _____
S20 7-05 SP	Reconnect Existing Sewer Pipe, 8-In. Diam., to New Structure	1 EA	\$ _____	\$ _____
S21 7-05 SP	Reconnect Existing Sewer Pipe, 10-In. Diam., to New Structure	5 EA	\$ _____	\$ _____
S22 7-05 SP	Reconnect Existing Sewer Pipe, 12-In. Diam., to New Structure	2 EA	\$ _____	\$ _____
S23 7-08 SP	Temporary Storm Sewer Bypass	1 LS	LUMP SUM	\$ _____
S24 7-08 SP	Temporary Storm Sewer Bypass Plan	1 LS	LUMP SUM	\$ _____
S25 7-08 SP	Underground Utility Potholing	3 EA	\$ _____	\$ _____
S26 7-17 SP	Ductile Iron Storm Sewer Pipe 12 In. Diam.	520 LF	\$ _____	\$ _____
S27 7-17 SP	PVC Storm Sewer Pipe 12 In. Diam.	40 LF	\$ _____	\$ _____
S28 7-17 SP	Ductile Iron Storm Sewer Pipe 6 In. Diam.	210 LF	\$ _____	\$ _____
S29 7-17 SP	Removal and Replacement of Unsuitable Material	250 CY	\$ _____	\$ _____
S30 8-02 SP	Landscape Restoration	1 FA	\$ 1,000.00	\$ 1,000.00
S31 8-04 SS	Cement Conc. Traffic Curb and Gutter	40 LF	\$ _____	\$ _____
S32 8-06 SP	Commercial Cement Conc. Alley/Driveway Entrance, 3-day	60 SY	\$ _____	\$ _____
S33 8-14 SP	Cement Conc. Sidewalk	20 SY	\$ _____	\$ _____

Contractor's Name: _____

Specification No. ES21-0547F

SCHEDULE C: WASTEWATER SEWER IMPROVEMENTS (Rule 170)

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
WW1 2-02 SS	Removal of Structures and Obstructions	1 LS	<u>LUMP SUM</u>	<u>\$</u>
WW2 2-09 SP	Structure Excavation Class B	6,940 CY	<u>\$</u>	<u>\$</u>
WW3 2-09 SS	Shoring or Extra Excavation Class B	54,390 SF	<u>\$</u>	<u>\$</u>
WW4 2-14 SP	Remove Existing Pavement, Type II Class C6	30 SY	<u>\$</u>	<u>\$</u>
WW5 2-14 SP	Remove Existing Pavement, Type II Class C12	20 SY	<u>\$</u>	<u>\$</u>
WW6 2-14 SP	Remove Existing Pavement, Type II Class CA	3,830 SY	<u>\$</u>	<u>\$</u>
WW7 2-14 SP	Remove Existing Pavement, Type II Class T	40 SY	<u>\$</u>	<u>\$</u>
WW8 2-15 SP	Remove Curb and Gutter	110 LF	<u>\$</u>	<u>\$</u>
WW9 2-16 SP	Remove Manhole	6 EA	<u>\$</u>	<u>\$</u>
WW10 4-04 SP	Crushed Surfacing Top Course	20 TN	<u>\$</u>	<u>\$</u>
WW11 4-04 SP	Recycled Concrete Aggregate	1,340 CY	<u>\$</u>	<u>\$</u>
WW12 5-04 SP	Temporary HMA Class ½" PG58-22, 3-Inch Minimum Depth, Installed & Removed	2,260 SY	<u>\$</u>	<u>\$</u>
WW13 5-04 SP	HMA Cl. 1/2 In. PG 58H-22 for Pavement Patch	690 TN	<u>\$</u>	<u>\$</u>
WW14 7-05 SP	Manhole 48 In. Diam. Type 1	18 EA	<u>\$</u>	<u>\$</u>
WW15 7-05 SP	Manhole 48 In. Diam. Type 3	1 EA	<u>\$</u>	<u>\$</u>
WW16 7-05 SS	Manhole Additional Height 48 In. Diam. Type 1	17 LF	<u>\$</u>	<u>\$</u>
WW17 7-05 SP	Reconnect Existing Sewer Pipe, 8-In. Diam., To New Structure	4 EA	<u>\$</u>	<u>\$</u>
WW18 7-05 SP	Reconnect Existing Sewer Pipe, 18-In. Diam., To New Structure	1 EA	<u>\$</u>	<u>\$</u>

Contractor's Name: _____

Specification No. ES21-0547F

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
WW19 7-05 SS	Abandon Existing Manhole	4 EA	\$ _____	\$ _____
WW20 7-08 SP	Temporary Wastewater Sewer Bypass	1 LS	LUMP SUM	\$ _____
WW21 7-08 SP	Temporary Wastewater Sewer Bypass Plan	1 LS	LUMP SUM	\$ _____
WW22 7-08 SP	Underground Utility Potholing	4 EA	\$ _____	\$ _____
WW23 7-17 SP	SDR 35 PVC Sanitary Sewer Pipe 8 In. Diam.	30 LF	\$ _____	\$ _____
WW24 7-17 SP	SDR 35 PVC Sanitary Sewer Pipe 10 In. Diam.	1,730 LF	\$ _____	\$ _____
WW25 7-17 SP	SDR 35 PVC Sanitary Sewer Pipe 12 In. Diam.	380 LF	\$ _____	\$ _____
WW26 7-17 SP	SDR 35 PVC Sanitary Sewer Pipe 15 In. Diam.	1,460 LF	\$ _____	\$ _____
WW27 7-17 SP	SDR 26 PVC Sanitary Sewer Pipe 18 In. Diam.	930 LF	\$ _____	\$ _____
WW28 7-17 SP	Removal and Replacement of Unsuitable Material	5,760 CY	\$ _____	\$ _____
WW29 7-18 SP	SDR 35 PVC Sanitary Sewer Pipe 6 In. Diam.	80 LF	\$ _____	\$ _____
WW30 7-18 SP	C900 PVC Sanitary Sewer Pipe 6 In. Diam.	710 LF	\$ _____	\$ _____
WW31 8-02 SP	Topsoil Type A	16 CY	\$ _____	\$ _____
WW32 8-02 SP	Arborist Wood Chip Mulch	12 CY	\$ _____	\$ _____
WW33 8-02 SP	Seeded Lawn Installation	65 SY	\$ _____	\$ _____
WW34 8-02 SP	PS Lagerstroemia indica x fauriei 'Muskogee'/ Muskogee Crape Myrtle; 5'-6' Ht.	1 EA	\$ _____	\$ _____
WW35 8-02 SP	PS Pinus strobus 'Blue Shag'/ Blue Shag Eastern White Pine; 5 Gal. Cont.	6 EA	\$ _____	\$ _____
WW36 8-02 SP	PS Berberis thunbergii 'Helmon Pillar'/ Helmond Pillar Barberry; 2 Gal. Cont.	6 EA	\$ _____	\$ _____
WW37 8-02 SP	PS Weigela florida 'Spilled Wine'/ Spilled Wine Weigela; 1 Gal. Cont.	22 EA	\$ _____	\$ _____
WW38 8-02 SP	PS Lonicera pileata 'Moss Green'/ Moss Green Box Leaf Honeysuckle; 2 Gal. Cont.	12 EA	\$ _____	\$ _____
WW39 8-02 SP	PS Miscanthus sinensis 'Morning Light'/ Morning Light Maiden Grass; 2 Gal. Cont.	3 EA	\$ _____	\$ _____

Contractor's Name: _____

Specification No. ES21-0547F

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
WW40 8-02 SP	PS Pennisetum orientale 'Little Bunny'/ Little Bunny Oriental Fountain Grass; 1 Gal. Cont.	49 EA	\$ _____	\$ _____
WW41 8-02 SP	PS Geum 'Totally Tangerine'/ Totally Tangerine Avens; 1 Gal. Cont.	65 EA	\$ _____	\$ _____
WW42 8-02 SP	PS Teucrium chamaedrys; Wall Germander; 1 Gal. Cont.	28 EA	\$ _____	\$ _____
WW43 8-02 SP	PS Hemerocallis 'Ruby Stella'/ Ruby Stella Daylily; 1 Gal. Cont.	12 EA	\$ _____	\$ _____
WW44 8-02 SP	PS Parahebe perfoliata/ Digger's Speedwell; 1 Gal. Cont.	17 EA	\$ _____	\$ _____
WW45 8-02 SP	PS Allium 'Millenium'/ Millenium Ornamental Onion; Bulb	75 EA	\$ _____	\$ _____
WW46 8-02 SP	PS Narcissus 'Tete-a-Tete'/ Tete-a-Tete Dafodil; Bulb	75 EA	\$ _____	\$ _____
WW47 8-02 SP	Decorative River Rock	2 CY	\$ _____	\$ _____
WW48 8-02 SP	Salvaged Basalt Column	1 LS	LUMP SUM	\$ _____
WW49 8-02 SP	Landscape Restoration	1 FA	\$ 1,000.00	\$ 1,000.00
WW50 8-04 SS	Cement Conc. Traffic Curb and Gutter	40 LF	\$ _____	\$ _____
WW51 8-04 SS	Cement Conc. Traffic Curb	20 LF	\$ _____	\$ _____
WW52 8-06 SP	Commercial Cement Conc. Alley/Driveway Entrance, 3-day	52 SY	\$ _____	\$ _____
WW53 8-13 SP	Poured Monument	2 EA	\$ _____	\$ _____
WW54 8-14 SP	Cement Conc. Sidewalk	40 SY	\$ _____	\$ _____

Contractor's Name: _____

Specification No. ES21-0547F

SCHEDULE D: WATER MAIN REPLACEMENT MPR 2021-03 (Rule 170)

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
W1 2-09 SS	Shoring or Extra Excavation Class B	13,270 SF	\$ _____	\$ _____
W2 2-14 SP	Remove Existing Pavement, Type II Class C6	30 SY	\$ _____	\$ _____
W3 2-14 SP	Remove Existing Pavement, Type II Class CA	1,880 SY	\$ _____	\$ _____
W4 2-14 SP	Remove Existing Pavement, Type II Class T	30 SY	\$ _____	\$ _____
W5 2-15 SP	Remove Curb and Gutter	50 LF	\$ _____	\$ _____
W6 4-04 SP	Crushed Surfacing Top Course	10 TN	\$ _____	\$ _____
W7 4-04 SP	Recycled Concrete Aggregate	680 CY	\$ _____	\$ _____
W8 5-04 SP	HMA Cl. 1/2 In. PG 58H-22 for Pavement Patch	350 TN	\$ _____	\$ _____
W9 5-04 SP	Temporary HMA Class 1/2" PG58-22, 3-Inch Minimum Depth, Installed & Removed	910 SY	\$ _____	\$ _____
W10 7-08 SP	Underground Utility Potholing	7 EA	\$ _____	\$ _____
W11 7-09 SP	Trench Compaction Test (as directed by the Inspector)	50 EA	\$ _____	\$ _____
W12 7-09 SP	Crushed Surfacing Top Course for Trench Backfill	2,670 TN	\$ _____	\$ _____
W13 7-09 SP	Trench Excavation & Disposal	1,340 CY	\$ _____	\$ _____
W14 7-09 SP	12-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to Furnish, Lay and Test	2,285 LF	\$ _____	\$ _____
W15 7-09 SP	8-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to Furnish, Lay and Test	85 LF	\$ _____	\$ _____
W16 7-09 SP	6-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to Furnish, Lay and Test	128 LF	\$ _____	\$ _____
W17 7-09 SP	4-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to Furnish, Lay and Test	10 LF	\$ _____	\$ _____
W18 7-09 SP	12-inch x 8-inch Cross, 4-B, M.J., Installed	1 EA	\$ _____	\$ _____

Contractor's Name: _____

Specification No. ES21-0547F

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
W19 7-09 SP	12-inch x 8-inch Ductile Iron Tee, 3-B, M.J., Installed	1 EA	\$ _____	\$ _____
W20 7-09 SP	12-inch x 6-inch Ductile Iron Tee, 3-B, M.J., Installed	5 EA	\$ _____	\$ _____
W21 7-09 SP	12-inch x 4-inch Ductile Iron Tee, 3-B, M.J., Installed	1 EA	\$ _____	\$ _____
W22 7-09 SP	8-inch x 6-inch Ductile Iron Reducer, 2-B, M.J., w/ Concrete Anchor, Installed	2 EA	\$ _____	\$ _____
W23 7-09 SP	12-inch Ductile Iron Ell, M.J., 45°, Installed	4 EA	\$ _____	\$ _____
W24 7-09 SP	8-inch Ductile Iron Ell, M.J., 45°, Installed	4 EA	\$ _____	\$ _____
W25 7-09 SP	6-inch Ductile Iron Ell, M.J., 45°, Installed	2 EA	\$ _____	\$ _____
W26 7-09 SP	12-inch Ductile Iron Solid Sleeve (Long Pattern) M.J., Installed	2 EA	\$ _____	\$ _____
W27 7-09 SP	6-inch Ductile Iron Solid Sleeve (Long Pattern) M.J., Installed	1 EA	\$ _____	\$ _____
W28 7-09 SP	6-inch Transition Coupling with 7-inch center ring, epoxy coating, and stainless steel bolts, C.I. to D.I., Installed	2 EA	\$ _____	\$ _____
W29 7-09 SP	12-inch Ductile Iron Cap, M.J., Tapped 2-inch, Installed and Removed	2 EA	\$ _____	\$ _____
W30 7-09 SP	8-inch Ductile Iron Cap, M.J., Tapped 2-inch, Installed and Removed	3 EA	\$ _____	\$ _____
W31 7-09 SP	6-inch Ductile Iron Cap, M.J., Tapped 2-inch, Installed and Removed	1 EA	\$ _____	\$ _____
W32 7-09 SP	8-inch Ductile Iron Plug, M.J., Tapped 2-inch, Installed and Removed	1 EA	\$ _____	\$ _____
W33 7-09 SP	4-inch Ductile Iron Plug, M.J., Tapped 2-inch, Installed and Removed	1 EA	\$ _____	\$ _____
W34 7-09 SP	Temporary 2-inch Blow-Off Assembly, Installed and Removed	7 EA	\$ _____	\$ _____
W35 7-09 SP	12-inch Mechanical Joint Restraining Gland, Installed	30 EA	\$ _____	\$ _____
W36 7-09 SP	8-inch Mechanical Joint Restraining Gland, Installed	22 EA	\$ _____	\$ _____
W37 7-09 SP	6-inch Mechanical Joint Restraining Gland, Installed	28 EA	\$ _____	\$ _____
W38 7-09 SP	4-inch Mechanical Joint Restraining Gland, Installed	4 EA	\$ _____	\$ _____
W39 7-09 SP	6-inch Push-on Joint Restraining Gasket, Installed	4 EA	\$ _____	\$ _____

Contractor's Name: _____

Specification No. ES21-0547F

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
W40 7-09 SP	Concrete Thrust Anchor, Installed	13 EA	\$ _____	\$ _____
W41 7-09 SP	Temporary Concrete Thrust Anchor, Installed and Removed	7 EA	\$ _____	\$ _____
W42 7-12 SP	12-inch Butterfly valve, M.J., ANSI/AWWA, C504, with C.I. Valve Box	9 EA	\$ _____	\$ _____
W43 7-12 SP	8-inch Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I. Valve Box	3 EA	\$ _____	\$ _____
W44 7-12 SP	6-inch Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I. Valve Box	5 EA	\$ _____	\$ _____
W45 7-12 SP	4-inch Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I. Valve Box	1 EA	\$ _____	\$ _____
W46 7-14 SP	6-inch Hydrant, M.J., 4.0-ft bury, with 4-inch Tacoma Standard Threads & 5-inch Quick Connect Coupling	4 EA	\$ _____	\$ _____
W47 7-17 SP	Storm, Sanitary, and Side Sewer Restoration	5 EA	\$ _____	\$ _____
W48 8-02 SP	Landscape Restoration	1 FA	\$5,000.00	\$ 5,000.00
W49 8-04 SS	Cement Conc. Traffic Curb and Gutter	50 LF	\$ _____	\$ _____
W50 8-13 SP	Poured Monument	3 EA	\$ _____	\$ _____
W51 8-14 SP	Cement Conc. Sidewalk	30 SY	\$ _____	\$ _____
W52 1-09 SS	Force Account	1 FA	\$ 20,000.00	\$ 20,000.00

Contractor's Name: _____

Specification No. ES21-0547F

SCHEDULE A: ROADWAY IMPROVEMENTS (R) (Rule 171)

Base Bid (Subtotal Item Nos. R1 - R18)	\$ _____	(1)
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ROADWAY IMPROVEMENTS TOTAL	\$ _____	(2)
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SCHEDULE B: STORM SEWER IMPROVEMENTS (S) (Rule 171)

Base Bid (Subtotal Item Nos. S1 - S33)	\$ _____	(3)
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STORM SEWER IMPROVEMENTS TOTAL	\$ _____	(4)
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SCHEDULE C: WASTEWATER SEWER IMPROVEMENTS (WW) (Rule 170)

Base Bid (Subtotal Item Nos. WW1 - WW54)	\$ _____	(5)
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10.3 Sales Tax (Items Nos. WW1 - WW54)	_____	(6)
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WASTEWATER SEWER IMPROVEMENTS TOTAL	\$ _____	(7)
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SCHEDULE D: WATER MAIN IMPROVEMENTS (W) (Rule 170)

Base Bid (Subtotal Item Nos. W1 - W52)	\$ _____	(8)
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10.3 Sales Tax (Items Nos. W1 - W52)	_____	(9)
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WATER IMPROVEMENTS TOTAL	\$ _____	(10)
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TOTAL BASE BID (2) + (4) + (5) + (8)	\$ _____	
(not including sales tax) Rule 170		

SIGNATURE PAGE

CITY OF TACOMA ENVIRONMENTAL SERVICES DEPARTMENT TPU – WATER DEPARTMENT

All submittals must be in ink or typewritten, executed by a duly authorized officer or representative of the bidding/proposing entity, and received and time stamped as directed in the **Request for Bids page near the beginning of the specification**. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

REQUEST FOR BIDS SPECIFICATION NO. ES21-0547F WW Sewer Replacement South J Street S J St Between S 13th & S 7th and I St Between S 7th & Division

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all materials, labor, tools, equipment and all other facilities and services in accordance with these specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

Non-Collusion Declaration

The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).

Bidder/Proposer's Registered Name

Signature of Person Authorized to Enter Date
into Contracts for Bidder/Proposer

Address

Printed Name and Title

City, State, Zip

(Area Code) Telephone Number / Fax Number

E-Mail Address

State Business License Number
in WA, also known as UBI (Unified Business Identifier) Number

E.I.No. / Federal Social Security Number Used on Quarterly
Federal Tax Return, U.S. Treasury Dept. Form 941

State Contractor's License Number
(See Ch. 18.27, R.C.W.)

E-Mail Address for Communications

Addendum acknowledgement #1_____ #2_____ #3_____ #4_____ #5_____

THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.

Herewith find deposit in the form of a cashier's check in the amount of \$_____ which amount is not less than 5-percent of the total bid.

SIGN HERE _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto the City of Tacoma, as Obligee, in the penal sum of _____ dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for

according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure to do so, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS _____ DAY OF _____, 20_____.

PRINCIPAL:

SURETY:

Received return of deposit in the sum of \$ _____, 20_____



City of Tacoma

Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (September 21, 2021), that the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

Bidder

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Individual ☐

Partnership ☐

Joint Venture ☐

Corporation ☐

State of Incorporation, or if not a corporation, the state where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

Specification No. _____

Name of Bidder: _____

State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor
(Must be in effect at the time of bid submittal):

Number: _____

Effective Date: _____

Expiration Date: _____

Current Washington Unified Business Identifier
(UBI) Number:

Number: _____

Do you have industrial insurance (workers' compensation)
Coverage nor your employees working in Washington?

☐ Yes ☐ No
☐ Not Applicable

Washington Employment Security Department Number

Number: _____

☐ Not Applicable

Washington Department of Revenue state excise tax
Registration number:

Number: _____

☐ Not Applicable

Have you been disqualified from bidding any public
works contracts under RCW 39.06.010 or 39.12.065(3)?

☐ Yes ☐ No
If yes, provide an explanation of your
disqualification on a separate page.

Do you have a physical office located in the state of
Washington?

☐ Yes ☐ No

If incorporated, in what state were you incorporated?

State: _____ ☐ Not Incorporated

If not incorporated, in what state was your business
entity formed?

State: _____

Have you completed the training required by RCW
39.04.350, or are you on the list of exempt businesses
maintained by the Department of Labor and Industries?

☐ Yes ☐ No

List of Subcontractor Categories of Work

Project Name _____

Subcontractor(s) that are proposed to perform the work of heating, ventilation and air conditioning, and/or plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. **This information must be submitted with the bid proposal or within one hour of the published bid submittal time via email to bids@cityoftacoma.org.**

Subcontractor(s) that are proposed to perform the work of structural steel installation and/or rebar installation must be listed below. **This information must be submitted with the bid proposal or within forty-eight hours of the published bid submittal time via email to bids@cityoftacoma.org.**

Failure to list subcontractors or naming more than one subcontractor to perform the same work will result in your bid being non-responsive. Contractors self-performing must list themselves below. The work to be performed is to be listed below the subcontractor(s) name.

Subcontractor Name	_____
Work to be Performed	_____

Subcontractor Name	_____
Work to be Performed	_____

Subcontractor Name	_____
Work to be Performed	_____

Subcontractor Name	_____
Work to be Performed	_____

Subcontractor Name	_____
Work to be Performed	_____



City of Tacoma
Community & Economic Development
Office of Equity in Contracting
747 Market Street, Rm 900
Tacoma WA 98402
253-591-5075

EQUITY IN CONTRACTING UTILIZATION FORM

This form is to document **only** the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- Prime contractors are **required** to solicit bids from firms approved by the City of Tacoma Equity in Contracting Program as Certified Businesses.
- It is the prime contractor's responsibility to check the certification status of the firms intended to be utilized prior to the submittal deadline.

Bidder's Name: _____

Address: _____ City/State/Zip: _____

Spec. No. _____ Base Bid * \$ _____ Complete company names and phone numbers are required to verify your usage of qualifying firms.

a. Company Name and Certification Number(s)	b. MBE, WBE, or SBE (Write all that apply)	c. NAICS code(s)	d. Contractor Bid Amount (100%)	e. Material Supplier Bid Amount (20%)	f. Estimated MBE Usage Dollar Amount	g. Estimated WBE Usage Dollar Amount	h. Estimated SBE Usage Dollar Amount
i. MBE Utilization %	j. WBE Utilization %	k. SBE Utilization %					

By signing and submitting this form the bidder certifies that the EIC firms listed will be used on this project including all applicable change orders.

Type or Print Name of Responsible Officer / Title

Signature of Responsible Officer

Date

INSTRUCTIONS FOR COMPLETING EIC UTILIZATION FORM

The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.

This form when submitted with your bid provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. * Base Bid is the prime contractor's bid, plus any alternates, additives and deductive selected by the City. Also, please refer to Items #10-12 below.
2. Column "a" – List all EIC companies that you will be awarding a contract to if you are the successful bidder.
3. Column "b" – Identify if this firm is being utilized as an MBE, WBE, or SBE. (Firms may count towards multiple requirements)
4. Column "c" – List the appropriate NAICS code for the scope of work, services, or materials/supplies for each contractor.
5. Column "d" – The bid amount must be indicated for **all** listed **EIC** that you plan on doing business with. This quote is the price that you and the contractor have negotiated prior to bid opening.
6. Column "e" – The bid amount must be indicated for **all** listed **EIC** that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.
8. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
9. Column "g" – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
10. Column "h" – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, Multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
11. Block "i" – The percent of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column "f") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "f" divided by Base Bid (*) x 100 = EIC usage as a percent of the Base Bid.)
12. Block "j" – The percent of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column "g") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "g" divided by Base Bid (*) x 100 = EIC usage as a percent of the Base Bid.)

13. Block "k" – The percent of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column "h") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "h" divided by Base Bid (*) x 100 = EIC usage as a percent of the Base Bid.)

It is the prime contractor's responsibility to check the status of EIC contractors prior to bid opening. Call the EIC Office at 253- 591-5075 for additional information.

CONTRACT

Resolution No.
Contract No.

This Contract is made and entered into effective this ____ day of ,20____, ("Effective Date") by and between the City of Tacoma, a Municipal Corporation of the State of Washington ("City"), and legal name of Supplier including type of business entity ("Contractor").

That in consideration of the mutual promises and obligations hereinafter set forth the Parties hereto agree as follows:

- I. Contractor shall fully execute and diligently and completely perform all work and provide all services and deliverables described herein and in the items listed below each of which are fully incorporated herein and which collectively are referred to as "Contract Documents":

-
1. Specification No. Enter Spec Number and Enter Spec Title together with all authorized addenda.
 2. Contractor's submittal (or specifically described portions thereof) dated Enter Submittal Date submitted in response to Specification No. Enter Spec Number and Enter Spec Title.
 3. Describe with specific detail and list separately any other documents that will make up the contract (fee schedule, work schedule, authorized personnel, etc.) or any other additional items mutually intended to be binding upon the parties.
-

Delete this highlighted sentence, paragraph II and sub-bullets #1 and #2 if there are no additional attachments to the contract (attachments would be things other than a specific, contract, or bonds).

- II. In the event of a conflict or inconsistency between the terms and conditions contained in this document entitled Contract and any terms and conditions contained the above referenced Contract Documents the following order of precedence applies with the first listed item being the most controlling and the last listed item the least controlling:
1. Contract
 2. List remaining Contract Documents in applicable controlling order.
- III. The Contract terminates on xxxxx. {May remove if not applicable}
- IV. The total price to be paid by City for Contracts full and complete performance hereunder may not exceed:
\$ _____, plus any applicable taxes.
- V. Contractor agrees to accept as full payment hereunder the amounts specified herein and in Contract Documents, and the City agrees to make payments at the times and in the manner and upon the terms and conditions specified. Except as may be otherwise provided herein or in Contract Documents Contractor shall provide and bear the expense of all equipment, work and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work and providing the services and deliverables required by this Contract.
- VI. The City's preferred method of payment is by ePayables (Payment Plus), followed by credit card (aka procurement card), then Electronic Funds Transfer (EFT) by Automated Clearing House (ACH), then check or other cash equivalent. CONTRACTOR may be required to have the capability of accepting the City's ePayables or credit card methods of payment. The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used. The City, in its sole discretion, will determine the method of payment for this Contract.
- VII. Failure by City to identify a deficiency in the insurance documentation provided by Contractor or failure of City to demand verification of coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- VIII. Contractor acknowledges, and by signing this Contract agrees, that the Indemnification provisions set forth in the controlling Contract Documents, including the Industrial Insurance immunity waiver (if applicable), are totally and fully part of this Contract and, within the context of the competitive bidding laws, have been mutually negotiated by the Parties hereto.

- IX. Contractor and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the requirements contained herein and in Contract Documents.
- X. It is further provided that no liability shall attach to City by reason of entering into this Contract, except as expressly provided herein.

IN WITNESS WHEREOF, the Parties hereto have accepted and executed, as of the Effective Date stated above, which shall be Effective Date for bonding purposes as applicable.

CITY OF TACOMA:

CONTRACTOR:

By:

By:

(City of Tacoma use only - blank lines are intentional)

Director of Finance: _____

City Attorney (approved as to form): _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____



PAYMENT BOND TO THE CITY OF TACOMA

Resolution No.
Bond No.

That we, the undersigned,

as principal, and _____
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of,
\$ _____, for the payment whereof Contractor and Surety bind themselves,
their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. _____

Specification Title: _____

Contract No. _____

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28, including all workers, laborers, mechanics, subcontractors, and materialmen, and all person who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract shall in any way affect its obligation on this bond, and waives notice of any changes, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the City, and where required, the Contractor, in accordance with RCW 39.08.030.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.

If any claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the City as a result of such suit. Venue for any action arising out of or in connection with this bond shall be in Pierce County, WA.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.

Resolution No.
Bond No.
Specification No.
Contract No.

One original bond shall be executed, and be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: Enter Vendor Legal Name

By: _____

Surety:

By: _____

Agent's Name: _____

Agent's Address: _____

SAMPLE



PERFORMANCE BOND TO THE CITY OF TACOMA

Resolution No.
Bond No.

That we, the undersigned,

as principal, and

as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of

\$ _____, for the payment whereof Contractor and Surety bind themselves,

their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. _____

Specification Title: _____

Contract No. _____

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory performance bond shall become null and void, if and when the principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the Contract and fulfill all terms and conditions of all duly authorized modifications, additions and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increase.

If the City shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgement, shall pay all costs and attorney's fees incurred by the City in enforcement of its rights hereunder. Venue for any action arising out of in connection with this bond shall be in Pierce County, Washington.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.

One original bond shall be executed, and signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: Enter Vendor Legal Name

By: _____

Surety:

By: _____

Agent's Name: _____

Agent's Address: _____

GENERAL RELEASE TO THE CITY OF TACOMA

The undersigned, named as the contractor for _____
between _____ and the City of Tacoma,
dated _____, 20____, hereby releases the City of
Tacoma, its departmental officers and agents from any and all claim or claims
whatsoever in any manner whatsoever at any time whatsoever arising out of and/or in
connection with and/or relating to said contract, excepting only the equity of the
undersigned in the amount now retained by the City of Tacoma under said contract, to-
wit the sum of \$_____.

Signed at Tacoma, Washington this _____ day of _____, 20____.

Contractor

By _____

Title _____

**LANDSCAPING WARRANTY AND DEFECT BOND
TO CITY OF TACOMA**

NAME OF PROJECT: _____ BOND NO: _____

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, _____
as Principal, and _____
a Corporation organized and existing under the laws of the State of Washington, as a
Surety Corporation, and qualified under the laws of the State of Washington to become
Surety upon bonds of Contractors with Municipal Corporations, as Surety, are jointly and
severally held and firmly bound to the CITY OF TACOMA in the penal sum of
\$ _____, representing the sum of 50% of all the "Plant Selection _____" per each
Bid Items, 100% of the bid item "Bark or Wood Chip Mulch," per Sq. Yd., and 50% of the
"Seed Mix Type _____", per Sq. Yd. as shown in the Proposal, together with any
adjustments, up or down because of changes in the contract work, for the payment of
which sum on demand we bind ourselves and our successors, heirs, administrators or
personal representatives, as the case may be.

WHEREAS, the Principal has completed the project in the CITY OF TACOMA,
and the Principal has constructed certain improvements in connection with said project
and intends to secure the successful operation of said improvements pursuant to
RCW 58.17 and the CITY OF TACOMA Code.

As part of acceptance of the contract work, Contractor has provided the City the
attached one-year warranty and defect bond in the amount specified above and in a
form acceptable to the City. The Principal shall perform Plant Establishment as specified
in the Contract and as identified in the approved Plant Establishment Plan for one (1)
year from the date of acceptance of the Contract work by the City of Tacoma. When
plants are replaced, the warranty for that plant shall extend for one (1) year from the
date such replacement is complete and accepted by the City. The Principal shall begin
to correct any defects within seven (7) calendar days of its receipt of notice from the City
of the defect. If the Principal does not complete the corrections within a reasonable time
as determined by the City, the City may complete the corrections and the Principal shall
pay all costs incurred by the City in order to accomplish the correction.

IN WITNESS WHEREOF, the above bounden parties have executed this
instrument under their separate seals. The name and corporate seal (if required by law)
of each corporate party is hereto affixed and duly signed by its undersigned
representatives pursuant to authority of its governing body.

PART II

SPECIAL PROVISIONS

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1
2 **INTRODUCTION**
3 **(April 1, 2018 Tacoma GSP)**
4

5 The following special provisions shall be used in conjunction with the "2021 Standard
6 Specifications for Road, Bridge and Municipal Construction" and "Standard Plans for
7 Road, Bridge, and Municipal Construction" as prepared by the Washington State
8 Department of Transportation (WSDOT). State Standard Specifications are available
9 through WSDOT, by calling (360) 705-7430, emailing engrpubs@wsdot.wa.gov, or
10 may be downloaded, free of charge, from this location on the WSDOT home page:
11 <http://www.wsdot.wa.gov/Publications/Manuals/M41-10.htm>
12

13 These Special Provisions are made up of both General Special Provisions (GSPs)
14 from various sources, which may have project-specific fill-ins; and project-specific
15 Special Provisions. Each Provision either supplements, modifies, or replaces the
16 comparable Standard Specification, or is a new Provision. The deletion, amendment,
17 alteration, or addition to any subsection or portion of the Standard Specifications is
18 meant to pertain only to that particular portion of the section, and in no way should it
19 be interpreted that the balance of the section does not apply.
20

21 The GSPs are labeled under the headers of each GSP, with the date of the GSP and
22 its source, as follows:
23

24 *(May 18, 2007 APWA GSP)*
25 *(August 7, 2006 WSDOT GSP)*
26 *(April 2, 2007 Tacoma GSP)*
27 *(Tacoma Water GSP)*
28

29 The project specific Special Provisions are labeled under the headers of each Special
30 Provision as follows:
31

32 **(*****)**
33

34 Due to the COVID-19 pandemic, a pre-proposal meeting will be held via conference
35 call at 10:00 A.M. PST, September 27, 2021. The phone number is 1 (888) 850-4523
36 and the access code is 544766. This conference call will answer questions regarding
37 the Equity in Contracting Program (EIC) and Local Employment and Apprenticeship
38 Training Program (LEAP) requirements included in the Contract. Prospective bidders
39 are urged to call in.

40 **DESCRIPTION OF WORK**

41 **(*****)**
42

43 This Contract shall generally consist of constructing approximately 750 feet of 6-inch
44 to 12-inch storm sewer main, 4,500 feet of 8-inch to 18-inch sewer main, and 2,500
45 feet of 6-inch to 12-inch potable water main. Work will also include new sewer laterals,
46 new water services, and pavement restoration.
47

48 **END OF SECTION**
49

1
2 **1-01 DEFINITIONS AND TERMS**

3
4 **1-01.3 Definitions**
5 **(January 4, 2016 APWA GSP)**

6 *Delete the heading Completion Dates and the three paragraphs that follow it, and replace*
7 *them with the following:*

8
9 **Dates**

10 ***Bid Opening Date***

11 The date on which the Contracting Agency publicly opens and reads the Bids.

12 ***Award Date***

13 The date of the formal decision of the Contracting Agency to accept the lowest
14 responsible and responsive Bidder for the Work.

15 ***Contract Execution Date***

16 The date the Contracting Agency officially binds the Agency to the Contract.

17 ***Notice to Proceed Date***

18 The date stated in the Notice to Proceed on which the Contract time begins.

19 ***Substantial Completion Date***

20 The day the Engineer determines the Contracting Agency has full and unrestricted
21 use and benefit of the facilities, both from the operational and safety standpoint,
22 any remaining traffic disruptions will be rare and brief, and only minor incidental
23 work, replacement of temporary substitute facilities, plant establishment periods,
24 or correction or repair remains for the Physical Completion of the total Contract.

25 ***Physical Completion Date***

26 The day all of the Work is physically completed on the project. All documentation
27 required by the Contract and required by law does not necessarily need to be
28 furnished by the Contractor by this date.

29 ***Completion Date***

30 The day all the Work specified in the Contract is completed and all the obligations
31 of the Contractor under the contract are fulfilled by the Contractor. All
32 documentation required by the Contract and required by law must be furnished by
33 the Contractor before establishment of this date.

34 ***Final Acceptance Date***

35 The date on which the Contracting Agency accepts the Work as complete.

36
37 *Supplement this section with the following:*

38
39 All references in the Standard Specifications, Amendments, or WSDOT General
40 Special Provisions, to the terms "Department of Transportation", "Washington State
41 Transportation Commission", "Commission", "Secretary of Transportation",
42 "Secretary", "Headquarters", and "State Treasurer" shall be revised to read
43 "Contracting Agency".

44
45 All references to the terms "State" or "state" shall be revised to read "Contracting
46 Agency" unless the reference is to an administrative agency of the State of
47 Washington, a State statute or regulation, or the context reasonably indicates
48 otherwise.

1
2 All references to "State Materials Laboratory" shall be revised to read "Contracting
3 Agency designated location".
4

5 All references to "final contract voucher certification" shall be interpreted to mean the
6 Contracting Agency form(s) by which final payment is authorized, and final completion
7 and acceptance granted.
8

9 **Additive**

10 A supplemental unit of work or group of bid items, identified separately in the Bid
11 Proposal, which may, at the discretion of the Contracting Agency, be awarded in
12 addition to the base bid.
13

14 **Alternate**

15 One of two or more units of work or groups of bid items, identified separately in the
16 Bid Proposal, from which the Contracting Agency may make a choice between
17 different methods or material of construction for performing the same work.
18

19 **Business Day**

20 A business day is any day from Monday through Friday except holidays as listed in
21 Section 1-08.5.
22

23 **Contract Bond**

24 The definition in the Standard Specifications for "Contract Bond" applies to whatever
25 bond form(s) are required by the Contract Documents, which may be a combination of
26 a Payment Bond and a Performance Bond.
27

28 **Contract Documents**

29 See definition for "Contract".
30

31 **Contract Time**

32 The period of time established by the terms and conditions of the Contract within which
33 the Work must be physically completed.
34

35 **Notice of Award**

36 The written notice from the Contracting Agency to the successful Bidder signifying the
37 Contracting Agency's acceptance of the Bid Proposal.
38

39 **Notice to Proceed**

40 The written notice from the Contracting Agency or Engineer to the Contractor
41 authorizing and directing the Contractor to proceed with the Work and establishing the
42 date on which the Contract time begins.
43

44 **Traffic**

45 Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs,
46 and equestrian traffic.
47
48

1 *This section is supplemented with the following:*
2 **(April 15, 2020 Tacoma GSP)**

3
4 All references to the acronym UDBE” shall be revised to read “DBE/EIC”.

5
6 All references in the Standard Specifications to the term “Proposal Bond” shall be
7 revised to read “Bid Bond.”
8

9 **Base Bid**

10 The summation of Bid Item amounts (extensions) in the Bid Forms, excluding
11 Additives, Alternates, Deductives, Force Accounts, and taxes collected separately
12 pursuant to Section 1-07.2.
13

14 **Calendar Day**

15 The time period of 24 hours measured from midnight to the next midnight, including
16 weekends and holidays.
17

18 **Change Order**

19 A written order to the Contractor, issued by the Contracting Agency after execution of
20 the contract, authorizing an addition, deletion, or other revision in the Work, within the
21 scope of the Contract Documents, and establishing the basis of payment and time
22 adjustments, if any, for the Work affected by the change.
23

24 **Day**

25 Unless otherwise specified, a calendar day.
26

27 **Deductive**

28 A supplemental unit of work or group of Bid Items, identified separately in the Bid,
29 which may, at the discretion of the Contract Agency, be deducted from the Base Bid
30 should the Contract Agency choose not to Award the total Base Bid.
31

32 **Grand Total Price**

33 The Grand Total Price of the Contract will include the Base Bid, Additives, Alternates,
34 Deductives, Force Accounts, and taxes collected separately pursuant to Section 1-
35 07.2.
36

37 **Standard Specifications**

38 Divisions One through Nine of the specified edition of the WSDOT “Standard
39 Specifications for Road, Bridge, and Municipal Construction.”
40

41 **END OF SECTION**
42
43

1
2 **1-02 BID PROCEDURES AND CONDITIONS**

3
4 **1-02.1 Prequalification of Bidders**

5 *Delete this section and replace it with the following:*

6
7 **1-02.1 Qualifications of Bidder**
8 **(January 24, 2011 APWA GSP)**
9

10 Before award of a public works contract, a bidder must meet at least the minimum
11 qualifications of RCW 39.04.350(1) to be considered a responsible bidder and
12 qualified to be awarded a public works project.
13

14 **1-02.2 Plans and Specifications**
15 **(June 27, 2011 APWA GSP)**

16 *Delete this section and replace it with the following:*

17
18 Information as to where Bid Documents can be obtained or reviewed can be found in
19 the Call for Bids (Advertisement for Bids) for the work.
20

21 After award of the contract, plans and specifications will be issued to the Contractor at
22 no cost as detailed below:
23

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	6	Furnished automatically upon award.
Contract Provisions	6	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	2	Furnished only upon request.

24
25 Additional plans and Contract Provisions may be obtained by the Contractor from the
26 source stated in the Call for Bids, at the Contractor's own expense.
27

28 **1-02.4(1) General**
29 **(August 15, 2016 APWA GSP Option B)**

30 *The first sentence of the last paragraph is revised to read:*

31
32 Any prospective Bidder desiring an explanation or interpretation of the Bid Documents,
33 shall request the explanation or interpretation in writing by close of business 6
34 business days preceding the bid opening to allow a written reply to reach all
35 prospective Bidders before the submission of their Bids.
36
37

1 **1-02.4(2) Subsurface Information**
2 **(March 8, 2013 APWA GSP)**

3 *The second sentence in the first paragraph is revised to read:*

4
5 The Summary of Geotechnical Conditions and the boring logs, if and when included
6 as an appendix to the Special Provisions, shall be considered as part of the Contract.

7
8 **(*****)**

9 *Supplement this section with the following:*

10
11 The City of Tacoma conducted a limited geotechnical investigation for this project. The
12 geotechnical conditions described in the report/on the boring logs are representative
13 only of the range of values encountered at the specific boring locations. These
14 geotechnical report/boring logs may not be representative of soil conditions that may
15 be encountered during construction. Prospective bidders should make their own
16 interpretations and conclusions about the soils conditions that may be encountered
17 during construction.

18
19 **1-02.5 Proposal Forms**
20 **(July 31, 2017 APWA GSP)**

21 *Delete this section and replace it with the following:*

22
23 The Proposal Form will identify the project and its location and describe the work. It
24 will also list estimated quantities, units of measurement, the items of work, and the
25 materials to be furnished at the unit bid prices. The bidder shall complete spaces on
26 the proposal form that call for, but are not limited to, unit prices; extensions;
27 summations; the total bid amount; signatures; date; and, where applicable, retail sales
28 taxes and acknowledgment of addenda; the bidder's name, address, telephone
29 number, and signature; the bidder's UDBE/DBE/M/WBE commitment, if applicable; a
30 State of Washington Contractor's Registration Number; and a Business License
31 Number, if applicable. Bids shall be completed by typing or shall be printed in ink by
32 hand, preferably in black ink. The required certifications are included as part of the
33 Proposal Form.

34
35 The Contracting Agency reserves the right to arrange the proposal forms with
36 alternates and additives, if such be to the advantage of the Contracting Agency. The
37 bidder shall bid on all alternates and additives set forth in the Proposal Form unless
38 otherwise specified.

39
40 **1-02.6 Preparation of Proposal**
41 **(July 11, 2018 APWA GSP)**

42 *Supplement the second paragraph with the following:*

- 43
44 4. If a minimum bid amount has been established for any item, the unit or lump
45 sum price must equal or exceed the minimum amount stated.
46 5. Any correction to a bid made by interlineation, alteration, or erasure, shall be
47 initialed by the signer of the bid.
48
49

1 *Delete the last two paragraphs, and replace them with the following:*

2
3 If no Subcontractor is listed, the Bidder acknowledges that it does not intend to use
4 any Subcontractor to perform those items of work.

5
6 The Bidder shall submit with their Bid a completed Contractor Certification Wage Law
7 Compliance form, provided by the Contracting Agency. Failure to return this
8 certification as part of the Bid Proposal package will make this Bid Nonresponsive and
9 ineligible for Award. A Contractor Certification of Wage Law Compliance form is
10 included in the Proposal Forms.

11
12 The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any
13 manner.

14
15 A bid by a corporation shall be executed in the corporate name, by the president or a
16 vice president (or other corporate officer accompanied by evidence of authority to
17 sign).

18
19 A bid by a partnership shall be executed in the partnership name, and signed by a
20 partner. A copy of the partnership agreement shall be submitted with the Bid Form if
21 any UDBE requirements are to be satisfied through such an agreement.

22
23 A bid by a joint venture shall be executed in the joint venture name and signed by a
24 member of the joint venture. A copy of the joint venture agreement shall be submitted
25 with the Bid Form if any UDBE requirements are to be satisfied through such an
26 agreement.

27
28 *The fourth paragraph is revised to read:*
29 **(October 18, 2013 Tacoma GSP)**

30
31 The bidder shall submit the following completed forms:
32 City of Tacoma – Equity in Contracting Utilization Form

33
34 **1-02.7 Bid Deposit**
35 **(April 1, 2012 Tacoma GSP)**

36 *Delete this section and replace it with the following:*

37
38 A deposit of at least 5 percent of the total Bid shall accompany each Bid. This deposit
39 may be cash, certified check, cashier's check, or a proposal bond (Surety bond). Any
40 proposal bond shall be on a form acceptable to the Contracting Agency and shall be
41 signed by the Bidder and the Surety. A proposal bond shall not be conditioned in any
42 way to modify the minimum 5 percent required. The Surety shall: (1) be registered with
43 the Washington State Insurance Commissioner, and (2) appear on the current
44 Authorized Insurance List in the State of Washington published by the Office of the
45 Insurance Commissioner.

46
47 The failure to furnish a Bid deposit of a minimum of 5 percent shall make the Bid
48 nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.

49
50 If a Bid Bond is furnished, the form furnished by the Contracting Agency must be
51 followed. No variations from the language thereof will be accepted.

1 If submitting your bid electronically, a scanned version of the original bid bond or
2 cashier's check shall accompany your electronic bid submittal. The original bid bond
3 or cashier's check shall be sent to the Contracting Agency and be received by the
4 Contracting Agency within 7 calendar days of the bid opening or the bidder may be
5 deemed non-responsive.

6
7 **Original bid bonds or cashier's check will be delivered to:**

8
9 City of Tacoma Procurement & Payables Division
10 Tacoma Public Utilities
11 P.O. Box 11007
12 Tacoma, WA 98411-0007
13

14 **1-02.9 Delivery of Proposal**

15 **(*****)**

16 *Delete this section and replace it with the following:*

17
18 Each Proposal shall be submitted in a sealed envelope or shall be submitted
19 electronically via email to bids@cityoftacoma.org, with the Project Name and Project
20 Number as stated in the Call for Bids clearly marked on the outside of the envelope,
21 or as otherwise required in the Bid Documents, to ensure proper handling and delivery.
22 All electronic documents shall be in PDF format. The Contracting Agency will not open
23 or consider any Bid Proposal that is received after the time specified in the Call for
24 Bids for receipt of Bid Proposals, or received in a location other than that specified in
25 the Call for Bids.

26
27 The Bidder shall submit to the Contracting Agency a signed "Certification of
28 Compliance with Wage Payment Statutes" document where the Bidder under penalty
29 of perjury verifies that the Bidder is in compliance with responsible bidder criteria in
30 RCW 39.04.350 subsection (1) (g), as required per Section 1-02.14. The "Certification
31 of Compliance with Wage Payment Statutes" document shall be submitted
32 electronically with the Bid Proposal.

33
34 **1-02.10 Withdrawing, Revising, or Supplementing Proposal**

35 **(March 16, 2016 Tacoma GSP)**

36 *Delete this section and replace it with the following:*

37
38 After submitting a Bid Proposal to the Contracting Agency, the Bidder may withdraw,
39 revise, or supplement it if:

- 40
41 1. The Bidder submits a written request signed by an authorized person, and
42 2. The Contracting Agency receives the request before the time set for receipt of
43 Proposals.
44 3. The revised or supplemented Bid Proposal (if any) is received by the
45 Contracting Agency before the time set for receipt of Bid Proposals.
46

47 The original Bid Proposal may be supplemented, or revised and resubmitted as the
48 official Bid Proposal if the Contracting Agency receives it before the time set for receipt
49 of Proposals.
50

1 **1-02.12 Public Opening of Proposals**

2 *(March 1, 2021 Tacoma GSP)*

3 *Supplement this section with the following:*

4
5 Proposals will be opened and publicly read via webcast at the time indicated in the call
6 for Bids unless the Bid opening has been delayed or canceled.

7
8 This public bid opening will be held via webinar. Please use the link below or on the
9 Request for Bids page to join the webinar:

10
11 <https://us02web.zoom.us/j/83250498294>

12
13 Preliminary and final bid results are posted at www.TacomaPurchasing.org.

14
15 **1-02.13 Irregular Proposals**

16 **(October 18, 2013 Tacoma GSP)**

17 *Delete this section and replace it with the following:*

- 18
19 1. A proposal will be considered irregular and will be rejected if:
- 20 a. The Bidder is not prequalified when so required;
 - 21 b. The authorized proposal form furnished by the Contracting Agency is not used
 - 22 or is altered;
 - 23 c. The completed proposal form contains any unauthorized additions, deletions,
 - 24 alternate Bids, or conditions;
 - 25 d. The Bidder adds provisions reserving the right to reject or accept the award,
 - 26 or enter into the Contract;
 - 27 e. A price per unit cannot be determined from the Bid Proposal;
 - 28 f. The Proposal form is not properly executed;
 - 29 g. The Bidder fails to submit or properly complete a Subcontractor list, if
 - 30 applicable, as required in Section 1-02.6;
 - 31 h. The bidder fails to submit or properly complete the EIC forms as required in
 - 32 Section 1-02.6;
 - 33 i. The Bid Proposal does not constitute a definite and unqualified offer to meet
 - 34 the material terms of the Bid invitation; or
 - 35 j. More than one proposal is submitted for the same project from a Bidder under
 - 36 the same or different names.
- 37 2. A Proposal may be considered irregular and may be reject if:
- 38 a. The Proposal does not include a unit price for every Bid item;
 - 39 b. Any of the unit prices are excessively unbalanced (either above or below the
 - 40 amount of a reasonable Bid) to the potential detriment of the Contracting
 - 41 Agency;
 - 42 c. Receipt of Addenda is not acknowledged;
 - 43 d. A member of a joint venture or partnership and the joint venture or partnership
 - 44 submit Proposals for the same project (in such an instance, both Bids may be
 - 45 rejected); or
 - 46 e. If Proposal form entries are not made in ink.
 - 47
 - 48

1 **1-02.14 Disqualifications of Bidders**
2 **(October 18, 2013 Tacoma GSP)**

3 *Supplement this section with the following:*
4

5 A Bidder will be deemed not responsible if:

- 6 1. the Bidder does not meet the mandatory bidder responsibility criteria in RCW
7 39.04.350(1), as amended; or
- 8 2. evidence of collusion exists with any other Bidder or potential Bidder.
9 Participants in collusion will be restricted from submitting further bids; or
- 10 3. the Bidder, in the opinion of the Contracting Agency, is not qualified for the
11 work or to the full extent of the bid, or to the extent that the bid exceeds the
12 authorized prequalification amount as may have been determined by a
13 prequalification of the Bidder; or
- 14 4. an unsatisfactory performance record exists based on past or current
15 Contracting Agency work or for work done for others, as judged from the
16 standpoint of conduct of the work; workmanship; or progress; affirmative
17 action; equal employment opportunity practices; termination for cause; or
18 Disadvantaged Business Enterprise, Minority Business Enterprise, or
19 Women's Business Enterprise utilization; or
- 20 5. there is uncompleted work (Contracting Agency or otherwise) which in the
21 opinion of the Contracting Agency might hinder or prevent the prompt
22 completion of the work bid upon; or
- 23 6. the Bidder failed to settle bills for labor or materials on past or current contracts,
24 unless there are extenuating circumstances acceptable to the Contracting
25 Agency; or
- 26 7. the Bidder has failed to complete a written public contract or has been
27 convicted of a crime arising from a previous public contract, unless there are
28 extenuating circumstances acceptable to the Contracting Agency; or
- 29 8. the Bidder is unable, financially or otherwise, to perform the work, in the opinion
30 of the Contracting Agency; or
- 31 9. there are any other reasons deemed proper by the Contracting Agency; or
- 32 10. the Bidder fails to meet the Project-specific supplemental bidder responsibility
33 criteria listed in the 1-02.1, or
- 34 11. The bidder fails to meet the EIC requirements as described in Section 1-02.6.
35

36 As evidence that the Bidder meets the bidder responsibility criteria above, the apparent
37 two lowest Bidders must submit to the Contracting Agency within 24 hours of the bid
38 submittal deadline, documentation (sufficient in the sole judgment of the Contracting
39 Agency) demonstrating compliance with all applicable responsibility criteria, including
40 all documentation specifically listed in the supplemental criteria. The Contracting
41 Agency reserves the right to request such documentation from other Bidders as well,
42 and to request further documentation as needed to assess bidder responsibility.
43

44 The basis for evaluation of Bidder compliance with these supplemental criteria shall
45 be any documents or facts obtained by Contracting Agency (whether from the Bidder
46 or third parties) which any reasonable owner would rely on for determining such
47 compliance, including but not limited to: (i) financial, historical, or operational data
48 from the Bidder; (ii) information obtained directly by the Contracting Agency from
49 owners for whom the Bidder has worked, or other public agencies or private
50 enterprises; and (iii) any additional information obtained by the Contracting Agency
51 which is believed to be relevant to the matter.

1
2 If the Contracting Agency determines the Bidder does not meet the bidder
3 responsibility criteria above and is therefore not a responsible Bidder, the Contracting
4 Agency shall notify the Bidder in writing, with the reasons for its determination. If the
5 Bidder disagrees with this determination, it may appeal the determination within 24
6 hours of receipt of the Contracting Agency's determination by presenting its appeal to
7 the Contracting Agency. The Contracting Agency will consider the appeal before
8 issuing its final determination. If the final determination affirms that the Bidder is not
9 responsible, the Contracting Agency will not execute a contract with any other Bidder
10 until at least two business days after the Bidder determined to be not responsible has
11 received the final determination.
12

13 **1-02.15 Pre-Award Information**
14 **(August 14, 2013 APWA GSP)**

15 *Revise this section to read:*
16

17 Before awarding any contract, the Contracting Agency may require one or more of
18 these items or actions of the apparent lowest responsible bidder:

- 19 1. A complete statement of the origin, composition, and manufacture of any or all
20 materials to be used,
- 21 2. Samples of these materials for quality and fitness tests,
- 22 3. A progress schedule (in a form the Contracting Agency requires) showing the
23 order of and time required for the various phases of the work,
- 24 4. A breakdown of costs assigned to any bid item,
- 25 5. Attendance at a conference with the Engineer or representatives of the Engineer,
- 26 6. Obtain, and furnish a copy of, a business license to do business in the city or
27 county where the work is located.
- 28 7. Any other information or action taken that is deemed necessary to ensure that
29 the bidder is the lowest responsible bidder.
30

31 **END OF SECTION**
32

1
2 **1-03 AWARD AND EXECUTION OF CONTRACT**
3

4 **1-03.1 Consideration of Bids**
5 **(January 23, 2006 APWA GSP)**

6 *Revise the first paragraph to read:*
7

8 After opening and reading proposals, the Contracting Agency will check them for
9 correctness of extensions of the prices per unit and the total price. If a discrepancy
10 exists between the price per unit and the extended amount of any bid item, the price
11 per unit will control. If a minimum bid amount has been established for any item and
12 the bidder's unit or lump sum price is less than the minimum specified amount, the
13 Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum
14 specified amount and recalculate the extension. The total of extensions, corrected
15 where necessary, including sales taxes where applicable and such additives and/or
16 alternates as selected by the Contracting Agency, will be used by the Contracting
17 Agency for award purposes and to fix the Awarded Contract Price amount and the
18 amount of the contract bond.
19

20 **1-03.2 Award of Contract**
21 **(March 27, 2003 Tacoma GSP)**

22 *All references to 45 calendar days shall be revised to read 60 calendar days.*
23

24 **1-03.3 Execution of Contract**
25 **(October 1, 2005 APWA GSP)**

26 *Revise this section to read:*
27

28 Copies of the Contract Provisions, including the unsigned Form of Contract, will be
29 available for signature by the successful bidder on the first business day following
30 award. The number of copies to be executed by the Contractor will be determined by
31 the Contracting Agency.
32

33 Within 10 calendar days after the award date, the successful bidder shall return the
34 signed Contracting Agency-prepared contract, an insurance certification as required
35 by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4.
36 Before execution of the contract by the Contracting Agency, the successful bidder shall
37 provide any pre-award information the Contracting Agency may require under Section
38 1-02.15.
39

40 Until the Contracting Agency executes a contract, no proposal shall bind the
41 Contracting Agency nor shall any work begin within the project limits or within
42 Contracting Agency-furnished sites. The Contractor shall bear all risks for any work
43 begun outside such areas and for any materials ordered before the contract is
44 executed by the Contracting Agency.
45

46 If the bidder experiences circumstances beyond their control that prevents return of
47 the contract documents within the calendar days after the award date stated above,
48 the Contracting Agency may grant up to a maximum of 10 additional calendar days for
49 return of the documents, provided the Contracting Agency deems the circumstances
50 warrant it.
51

1 **1-03.4 Contract Bond**
2 **(July 23, 2015 APWA GSP)**

3 *Delete the first paragraph and replace it with the following:*
4

5 The successful bidder shall provide executed payment and performance bond(s) for
6 the full contract amount. The bond may be a combined payment and performance
7 bond; or be separate payment and performance bonds. In the case of separate
8 payment and performance bonds, each shall be for the full contract amount. The
9 bond(s) shall:

- 10 1. Be on Contracting Agency-furnished form(s);
- 11 2. Be signed by an approved surety (or sureties) that:
 - 12 a. Is registered with the Washington State Insurance Commissioner, and
 - 13 b. Appears on the current Authorized Insurance List in the State of Washington
 - 14 published by the Office of the Insurance Commissioner,
- 15 3. Guarantee that the Contractor will perform and comply with all obligations, duties,
16 and conditions under the Contract, including but not limited to the duty and
17 obligation to indemnify, defend, and protect the Contracting Agency against all
18 losses and claims related directly or indirectly from any failure:
 - 19 a. Of the Contractor (or any of the employees, subcontractors, or lower tier
 - 20 subcontractors of the Contractor) to faithfully perform and comply with all
 - 21 contract obligations, conditions, and duties, or
 - 22 b. Of the Contractor (or the subcontractors or lower tier subcontractors of the
 - 23 Contractor) to pay all laborers, mechanics, subcontractors, lower tier
 - 24 subcontractors, material person, or any other person who provides supplies or
 - 25 provisions for carrying out the work;
- 26 4. Be conditioned upon the payment of taxes, increases, and penalties incurred on
- 27 the project under titles 50, 51, and 82 RCW; and
- 28 5. Be accompanied by a power of attorney for the Surety's officer empowered to sign
- 29 the bond; and
- 30 6. Be signed by an officer of the Contractor empowered to sign official statements
- 31 (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be
- 32 signed by the president or vice president, unless accompanied by written proof of
- 33 the authority of the individual signing the bond(s) to bind the corporation (i.e.,
- 34 corporate resolution, power of attorney, or a letter to such effect signed by the
- 35 president or vice president).
- 36

37 **1-03.5 Failure to Execute Contract**
38 **(April 15, 2020 Tacoma GSP)**

39 *The first sentence is revised to read:*
40

41 Failure to return the insurance certification and bond with the signed contract as
42 required in Section 1-03.3, or failure to provide Equity In Contracting (EIC) information
43 if required in the contract, or failure or refusal to sign the Contract, or failure to register
44 as a contractor in the state of Washington shall result in forfeiture of the bid bond or
45 deposit of this Bidder

46
47 **END OF SECTION**
48

1
2 **1-04 SCOPE OF THE WORK**
3

4 **1-04.2 Coordination of Contract Documents, Plans, Special Provisions,**
5 **Specifications, and Addenda**
6 **(March 13, 2012 APWA GSP)**

7 *Revise the second paragraph to read:*
8

9 Any inconsistency in the parts of the contract shall be resolved by following this order
10 of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

- 11 1. Addenda,
- 12 2. Proposal Form,
- 13 3. Special Provisions,
- 14 4. Contract Plans,
- 15 5. Amendments to the Standard Specifications,
- 16 6. Standard Specifications,
- 17 7. Contracting Agency's Standard Plans or Details (if any), and
- 18 8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.
- 19

20 **1-04.4 Changes**

21 **(*****)**

22 *Revise the fifth paragraph to read:*
23

24 For item 2, if the actual quantity of any item, exclusive of added or deleted amounts
25 included in agreed change orders, increases or decreases by more than 25 percent
26 from the original Plan quantity, the unit Contract prices for that item may be adjusted
27 in accordance with Section 1-04.6; provided that, the un-adjusted unit Contract price
28 shall apply to any Work completed prior to the Contractor receiving a written change
29 order approved by the Engineer, or an oral order from the Engineer before actually
30 receiving the written change order.
31

32 **1-04.6 Variation in Estimated Quantities**

33 **(July 23, 2015 APWA GSP, Option B; may not be used on FHWA-funded projects)**

34 *Revise the first paragraph to read:*
35

36 Payment to the Contractor will be made only for the actual quantities of Work
37 performed and accepted in conformance with the Contract. When the accepted
38 quantity of Work performed under a unit item varies from the original Proposal quantity,
39 payment will be at the unit Contract price for all Work unless the total accepted quantity
40 of any Contract item, adjusted to exclude added or deleted amounts included in
41 change orders accepted by both parties, increases or decreases by more than 25
42 percent from the original Proposal quantity, and if the total extended bid price for that
43 item at time of award is equal to or greater than 10 percent of the total contract price
44 at time of award. In that case, payment for contract work may be adjusted as described
45 herein:
46
47

1 **(May 25, 2006 APWA GSP)**

2 *This section is supplemented with the following:*

3
4 The quantities for "Remove Curb and Gutter", "Temporary HMA Class ½" PG 58-22,
5 3-Inch Minimum Depth, Installed & Removed", "Underground Utility Potholing",
6 "Removal and Replacement of Unsuitable Material", and "Cement Conc. Sidewalk"
7 have been entered into the Proposal only to provide a common proposal for bidders.
8 Actual quantities will be determined in the field as the work progresses, and will be
9 paid at the original bid price, regardless of final quantity. These bid items shall not be
10 subject to the provisions of 1-04.6 of the Standard Specifications.

11
12 **END OF SECTION**
13
14

1
2 **1-05 CONTROL OF WORK**
3

4 **1-05.3 Plans and Working Drawings**
5 **(January 6, 2015 Tacoma GSP)**

6 *This section is deleted in its entirety and replaced with the following:*
7

8 **1-05.3 Submittals**
9

10 The Contractor shall not install materials or equipment, which requires submittals, until
11 reviewed by the Contracting Agency. Late submissions by the Contractor shall not be
12 cause for time extension.
13

14 **Submittals shall be made per Bid Item, rather than per material.** The Contractor
15 **shall be responsible for ensuring that each submittal includes cut sheets and/or**
16 **other information for all pertinent materials necessary to complete the work for**
17 **each Bid Item. It is understood that producing submittals for each Bid Item may**
18 **require multiple submittals of common materials that are associated with more**
19 **than one Bid Item. The Contractor shall also be responsible for producing**
20 **submittals that may only be associated with a Specification Section, not a**
21 **particular Bid Item.**
22

23 The Contractor shall submit electronic copies of each submittal required by the
24 Contract Documents through the Contracting Agency's web-based project
25 management software, e-Builder® (see Section 1-05.19), unless otherwise required
26 in these Special Provisions. This includes, but is not limited to:

- 27 • Shop Drawings/Plans
- 28 • Product Data
- 29 • Samples
- 30 • Reports
- 31 • Material Submittals (Ref. 1-06)
- 32 • Progress Schedules (Ref. 1-08.3)
- 33 • Guarantees/Warranties (Ref. 1-05.10)
- 34

35 Physical samples shall be delivered with a hardcopy transmittal of the e-Builder®
36 submittal.
37

38 The Engineer will return reviewed submittals through the e-Builder® web-based
39 project management software for the Contractor's use.
40

41 **1-05.3(1) Submittal Schedule**
42

43 In conformance with section 1-08.3, the progress schedule shall be submitted and
44 reviewed prior to commencing any work. No delay claim shall be entertained for
45 Contractor's failure to comply.
46

47 No claim will be allowed for damages or extension of time resulting from rejection of a
48 submittal or the requirement of resubmittals as outlined by this section.
49

The Engineer's review will be completed as quickly as possible, but may require up to ten (10) working days from the date the submittals or resubmittals are received until they are sent to the Contractor. If more than ten (10) working days are required for the Engineer's review of any individual submittal or resubmittal, an extension of time will be considered in accordance with Section 1-08.8.

1-05.3(2) Submittal Procedures

Contractor submittals shall be in accordance with the following:

The Contractor shall thoroughly review each submittal for dimensions, quantities, and details of the material or item shown. The Contractor shall review each submittal and note any errors, omissions, or deviations with the Contract Documents. The Contractor shall accept full responsibility for the completeness of each submittal.

Each submittal shall have a unique number assigned to it (via e-Builder®). On each page, indicate the page number, and total number of pages in each submittal.

Each submittal shall indicate the following:

1. The intended use of the item in the work;
2. Clearly indicate only applicable items on any catalog cut sheets;
3. The current revision, issue number, and data shall be indicated on all drawings and other descriptive data.
4. Description of Submittal.
5. Related Specification Section and/or plan sheet.
6. Each material submittal shall clearly indicate the name and address of all suppliers, processors, distributors, and/or producers from which the Contractor directly purchased each material.

When submitting product data, the Contractor shall modify drawings to delete any information not applicable to the project and add information that is applicable to the project. The Contractor shall mark copies of printed material to clearly identify the pertinent materials, products or models.

Samples submitted shall be of sufficient size and quantity to clearly illustrate functional characteristics of product or material and full range of colors available. Field samples and mock-ups, where required, shall be erected at the project site where directed by the Engineer.

The Contractor shall notify the Engineer, in writing at time of submission, of deviations in submittals from requirements of the contract documents.

The City shall not be responsible for delays in reviewing submittals not submitted in accordance with these specifications.

1-05.3(3) Engineer's Review of Submittals

The Engineer's review of drawings and data submitted by the Contractor will cover only general conformity with the Contract drawings and specifications. The Engineer's review of submittals shall not relieve the Contractor from responsibility for errors, omissions, deviations, or responsibility for compliance with the Contract documents.

1
2 Review of a separate item does not constitute review of an assembly in which the item
3 functions.

4
5 When the submittal or resubmittal is marked "REVIEWED" no further correspondence
6 is required. When the submittal is marked "REVIEWED WITH COMMENTS" the
7 Contractor shall comply with any comments on the return submittal.

8 9 **1-05.3(4) Resubmittals**

10
11 When a submittal is marked "REVISE AND RESUBMIT" or "REJECTED," the
12 Contractor shall make the corrections as noted and instructed by the Engineer and
13 resubmit via e-Builder®. The Contractor shall not install material or equipment that
14 has received a review status of "REVISE AND RESUBMIT" or REJECTED".

15
16 When corrected copies are resubmitted, the Contractor shall in writing direct specific
17 attention to all revisions and shall list separately any revision made other than those
18 called for by the Engineer on previous submittals. e-Builder® will assign the
19 resubmittal number of the original submittal followed by a revision number (1, 2, etc.)
20 to indicate the sequence of the resubmittal.

21
22 Each submittal shall have a unique number assigned to it (via e-Builder®).

23
24 The Contractor shall revise returned submittals as required and resubmit until final
25 review is obtained. Any associated progress delay due to the Contractor's need to
26 revise and resubmit is the Contractor's sole responsibility.

27
28 The Contractor shall verify that all exceptions previously noted by the Engineer have
29 been accounted for.

30 31 **1-05.3(5) Submittal Requirements by Section**

32
33 The following is a general summary of submittal requirements. This summary is not
34 inclusive of all submittal requirements and does not relieve the Contractor of their
35 responsibility to provide submittals as noted in subsequent sections of the
36 specifications. The Contractor shall review each bid item and individual section in the
37 applicable provisions or specifications, as noted below, for specific requirements.
38

Section	Description
1-05.3(6)	Project Red Line Drawings
1-06.1	Proposed Material Sources
1-06.3	Manufacturer's Certificate of Compliance
1-07.15	Temporary Water Pollution/Erosion Control Plan
1-07.15(1)	Spill Prevention, Control and Countermeasures (SPCC) Plan
1-07.16(1)	Property Owner Notification
1-08.3(2)	Progress Schedule
1-09.6	Equipment Rental Rates and Equipment Watch Sheets
1-09.9	Schedule Of Values
1-10.2	Traffic Control Plan
2-07.3(1)	Hydrant Permit
2-09.3(4)	Engineered Shoring Design for Depths Over 20 Feet
4-04	Crushed Surfacing Top Course
4-04	Recycled Concrete Aggregate
5-04	Asphalt Mix Design Certification
5-05	Concrete Mix Design
7-05	Manholes
7-05	Castings
7-05	Kor-N-Seal Connector
7-05	Sand Collar
7-08.3(1)C	Pipe Bedding
7-08.3(3)	Trench Backfill
7-08.3(5)	Temporary Storm Sewer Bypass Plan
7-08.3(5)	Temporary Wastewater Sewer Bypass Plan
7-08.3(6)	Pipe Abandonment Plan
7-09	Pipe and Fitting materials
7-17	Pipe and Fitting materials
8-01.3(1)A	Stormwater Pollution Prevention Plan (SWPPP)
8-01	NPDES Permit Transfer of Coverage
8-02	Topsoil
8-02	Seed Mix
8-02	Arborist Wood Chip Mulch
8-02	Fine Compost
8-02	Decorative River Rock
8-02	Tree Bag Watering System
8-02	Plant Selections

1-05.3(6) Project Red Line Drawings

The Contractor shall submit Project Red Line Drawings in accordance with the following.

Red line drawings refer to those documents maintained and annotated by the Contractor during construction and is defined as, a neatly and legibly marked set of Contract drawings showing any changes made to the original details of work.

1 The Contractor shall maintain drawings in good condition; protect from deterioration
2 and keep in a clean, dry, and secure location. The Project Red Line Drawings shall
3 not be used for construction purposes.

4
5 The Contractor shall provide to the City, access to Project Red Line Drawings at all
6 times during normal working hours.

7
8 Red line drawings shall be updated on a continuous basis. The Contractor shall bring
9 the up-to-date drawings to a monthly "red line review" meeting where the Engineer will
10 verify the maintenance of the Project Red Line Drawings as part of the condition
11 precedent to approving the monthly progress payment disbursement process.
12 Monthly progress payments to the Contractor may not be processed, if red line
13 information for the involved work to date has not been accurately recorded on the
14 Project Red Line Drawings.

15
16 At the completion of the construction work, prior to pre-final payment, all Project Red
17 Line Drawings shall be submitted to the Engineer.

18
19 A. Project Red Line Drawings:

20
21 Do not permanently conceal any work until required information has been recorded.
22 Mark drawings to show the actual installation where the installation varies from the
23 work as originally shown on the Contract drawings or indicated in the Contract
24 specifications. Give particular attention to information on concealed elements that
25 would be difficult to measure and record at a later date.

- 26
27 1. Changes and information shall be clearly drawn, described and shown
28 technically correct.
29 2. Mark drawings with red erasable pencil.
30 3. Record data as soon as possible after obtaining it.
31 4. Mark any new information.
32 5. Keep accurate measurements of horizontal and vertical locations of
33 underground services and utilities.
34 6. Mark any changes made where installation varies from that shown originally,
35 such as, in materials, equipments, locations, alignments, elevations, and any
36 other dimensions of the work.
37 7. For any work not demolished, abated, or salvaged, cross out and appropriately
38 annotate "Not Complete".
39 8. Indicate revisions to drawings with a "cloud" drawn around the revision and
40 note date the revision(s) was made.
41 9. Note Request For Change (RFC), Request For Information (RFI), and similar
42 identification, where applicable.

43
44 B. Format:

45
46 Identify and date each print; include the designation "PROJECT RED LINE
47 DRAWINGS" in a prominent location.

- 48
49 1. Prints: Organize Red Line Drawings into manageable sets. Include
50 identification on cover sheets.
51 2. Identify cover sheets as follows:

- Specification No.
 - Project Name
 - Date
 - "PROJECT RED LINE DRAWINGS"
 - Name of Engineer
 - Name of Contractor
3. Electronic Copies: Scan full-size (dimension size: 22x34) Project Red Line Drawings and submit, on a CD-R, in pdf format.

The lump sum Contract price for "Project Red Line Drawings" shall be full pay for all costs associated with, including but not limited to, documenting, revising, updating, maintaining, and submitting red line drawings at the completion of construction work.

1-05.3(8) Clarifications

Clarifications of the Contract intent shall be submitted via a Request for Information (RFI) using e-Builder® as described in Section 1-05.19 of the Special Provisions. The Contractor shall provide a clear and concise clarification question, specific project document reference such as plan detail number or specification number, proposed solution to the clarification question, and provide any supporting documentation necessary to understand the clarification question.

Request for Information responses provided by the Contracting Agency shall be incorporated into the Project Red-Line Drawings, if resulting in a change to the Contract Plans.

Request for Information responses provided by the Contracting Agency shall not be construed to be a change to the Contract Documents.

1-05.4 Conformity With and Deviations from Plans and Stakes

Add the following new sub-section:

1-05.4(1) Roadway and Utility Surveys (October 1, 2005 APWA GSP)

The Engineer shall furnish to the Contractor one time only all principal lines, grades, and measurements the Engineer deems necessary for completion of the work. These shall generally consist of one initial set of:

1. Slope stakes for establishing grading;
2. Curb grade stakes;
3. Centerline finish grade stakes for pavement sections wider than 25 feet; and
4. Offset points to establish line and grade for underground utilities such as water, sewers, and storm drains.

On alley construction projects with minor grade changes, the Engineer shall provide only offset hubs on one side of the alley to establish the alignment and grade.

1 (*****)

2 *Supplement this section with the following:*

3
4 **Monument Positions**

5 The Owner will be responsible for perpetuating and documenting existing monuments
6 in compliance with the Application for Permit to Remove or Destroy a Survey
7 monument (WAC 332-120).

8
9 Contractor shall provide the City with a minimum 3 working day written notice when
10 the Contractor believes that removal of an existing monument is required to complete
11 the work, to give the City sufficient time to reference the monument for reinstallation.

12
13 Upon completion of the roadway surface, the destroyed and new, proposed
14 monuments positions will be set and referenced by the City. The Contractor will then
15 drill and core out the monument position, install the poured monument, and place a
16 blank brass monument centered in the cored position. The City will then mark the
17 referenced position and file a completion report for Monument Removal or Destruction
18 with DNR, as applicable for pre-existing monuments, or a Record of Survey for new
19 monuments.

20
21 If existing monuments are disturbed by the Contractor without approval, and prior to
22 referencing, said monuments will be reset by the City and all associated costs will be
23 borne solely by the Contractor.

24
25 **1-05.7 Removal of Defective and Unauthorized Work**
26 **(October 1, 2005 APWA GSP)**

27 *Supplement this section with the following:*

28
29 If the Contractor fails to remedy defective or unauthorized work within the time
30 specified in a written notice from the Engineer, or fails to perform any part of the work
31 required by the Contract Documents, the Engineer may correct and remedy such work
32 as may be identified in the written notice, with Contracting Agency forces or by such
33 other means as the Contracting Agency may deem necessary.

34
35 If the Contractor fails to comply with a written order to remedy what the Engineer
36 determines to be an emergency situation, the Engineer may have the defective and
37 unauthorized work corrected immediately, have the rejected work removed and
38 replaced, or have work the Contractor refuses to perform completed by using
39 Contracting Agency or other forces. An emergency situation is any situation when, in
40 the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might
41 cause serious risk of loss or damage to the public.

42
43 Direct or indirect costs incurred by the Contracting Agency attributable to correcting
44 and remedying defective or unauthorized work, or work the Contractor failed or refused
45 to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer
46 from monies due, or to become due, the Contractor. Such direct and indirect costs
47 shall include in particular, but without limitation, compensation for additional
48 professional services required, and costs for repair and replacement of work of others
49 destroyed or damaged by correction, removal, or replacement of the Contractor's
50 unauthorized work.

1 No adjustment in Contract time or compensation will be allowed because of the delay
2 in the performance of the work attributable to the exercise of the Contracting Agency's
3 rights provided by this Section.
4

5 The rights exercised under the provisions of this section shall not diminish the
6 Contracting Agency's right to pursue any other avenue for additional remedy or
7 damages with respect to the Contractor's failure to perform the work as required.
8

9 **1-05.10 Guarantees**

10 **(*****)**

11 *Supplement this section with the following:*
12

13 **Landscape Warranty and Defect Bond**

14 In addition to comprehensive project guarantees as specified in the Standard
15 Specifications, Contractor shall be required to execute a Landscape Warranty and
16 Defect Bond immediately prior to final project acceptance. Said bond shall remain in
17 place until satisfactory completion of Plant Establishment. See Section 8-02.3(13) for
18 Plant Establishment requirements.
19

20 **1-05.11 Final Inspection**

21 *Delete this section and replace it with the following:*
22

23 **1-05.11 Final Inspections and Operational Testing**
24 **(October 1, 2005 APWA GSP)**
25

26 **1-05.11(1) Substantial Completion Date**
27

28 When the Contractor considers the work to be substantially complete, the Contractor
29 shall so notify the Engineer and request the Engineer establish the Substantial
30 Completion Date. The Contractor's request shall list the specific items of work that
31 remain to be completed in order to reach physical completion. The Engineer will
32 schedule an inspection of the work with the Contractor to determine the status of
33 completion. The Engineer may also establish the Substantial Completion Date
34 unilaterally.
35

36 If, after this inspection, the Engineer concurs with the Contractor that the work is
37 substantially complete and ready for its intended use, the Engineer, by written notice
38 to the Contractor, will set the Substantial Completion Date. If, after this inspection the
39 Engineer does not consider the work substantially complete and ready for its intended
40 use, the Engineer will, by written notice, so notify the Contractor giving the reasons
41 therefore.
42

43 Upon receipt of written notice concurring in or denying substantial completion,
44 whichever is applicable, the Contractor shall pursue vigorously, diligently and without
45 unauthorized interruption, the work necessary to reach Substantial and Physical
46 Completion. The Contractor shall provide the Engineer with a revised schedule
47 indicating when the Contractor expects to reach substantial and physical completion
48 of the work.
49

1 The above process shall be repeated until the Engineer establishes the Substantial
2 Completion Date and the Contractor considers the work physically complete and ready
3 for final inspection.
4

5 **1-05.11(2) Final Inspection and Physical Completion Date**

6

7 When the Contractor considers the work physically complete and ready for final
8 inspection, the Contractor by written notice, shall request the Engineer to schedule a
9 final inspection. The Engineer will set a date for final inspection. The Engineer and the
10 Contractor will then make a final inspection and the Engineer will notify the Contractor
11 in writing of all particulars in which the final inspection reveals the work incomplete or
12 unacceptable. The Contractor shall immediately take such corrective measures as are
13 necessary to remedy the listed deficiencies. Corrective work shall be pursued
14 vigorously, diligently, and without interruption until physical completion of the listed
15 deficiencies. This process will continue until the Engineer is satisfied the listed
16 deficiencies have been corrected.
17

18 If action to correct the listed deficiencies is not initiated within 7 days after receipt of
19 the written notice listing the deficiencies, the Engineer may, upon written notice to the
20 Contractor, take whatever steps are necessary to correct those deficiencies pursuant
21 to Section 1-05.7.

22 The Contractor will not be allowed an extension of contract time because of a delay in
23 the performance of the work attributable to the exercise of the Engineer's right
24 hereunder.
25

26 Upon correction of all deficiencies, the Engineer will notify the Contractor and the
27 Contracting Agency, in writing, of the date upon which the work was considered
28 physically complete. That date shall constitute the Physical Completion Date of the
29 Contract, but shall not imply acceptance of the work or that all the obligations of the
30 Contractor under the contract have been fulfilled.
31

32 **1-05.11(3) Operational Testing**

33

34 It is the intent of the Contracting Agency to have at the Physical Completion Date a
35 complete and operable system. Therefore when the work involves the installation of
36 machinery or other mechanical equipment; street lighting, electrical distribution or
37 signal systems; irrigation systems; buildings; or other similar work it may be desirable
38 for the Engineer to have the Contractor operate and test the work for a period of time
39 after final inspection but prior to the physical completion date. Whenever items of work
40 are listed in the Contract Provisions for operational testing they shall be fully tested
41 under operating conditions for the time period specified to ensure their acceptability
42 prior to the Physical Completion Date. During and following the test period, the
43 Contractor shall correct any items of workmanship, materials, or equipment which
44 prove faulty, or that are not in first class operating condition. Equipment, electrical
45 controls, meters, or other devices and equipment to be tested during this period shall
46 be tested under the observation of the Engineer, so that the Engineer may determine
47 their suitability for the purpose for which they were installed. The Physical Completion
48 Date cannot be established until testing and corrections have been completed to the
49 satisfaction of the Engineer.
50

1 The costs for power, gas, labor, material, supplies, and everything else needed to
2 successfully complete operational testing, shall be included in the unit Contract prices
3 related to the system being tested, unless specifically set forth otherwise in the
4 proposal.

5
6 Operational and test periods, when required by the Engineer, shall not affect a
7 manufacturer's guaranties or warranties furnished under the terms of the Contract.
8

9 *Add the following new section:*

10
11 **1-05.12(1) One-Year Guarantee Period**
12 **(March 8, 2013 APWA GSP)**
13

14 The Contractor shall return to the project and repair or replace all defects in
15 workmanship and material discovered within one year after Final Acceptance of the
16 Work. The Contractor shall start work to remedy any such defects within 7 calendar
17 days of receiving Contracting Agency's written notice of a defect, and shall complete
18 such work within the time stated in the Contracting Agency's notice. In case of an
19 emergency, where damage may result from delay or where loss of services may result,
20 such corrections may be made by the Contracting Agency's own forces or another
21 Contractor, in which case the cost of corrections shall be paid by the Contractor. In
22 the event the Contractor does not accomplish corrections within the time specified, the
23 work will be otherwise accomplished and the cost of same shall be paid by the
24 Contractor.
25

26 When corrections of defects are made, the Contractor shall then be responsible for
27 correcting all defects in workmanship and materials in the corrected work for one year
28 after acceptance of the corrections by Contracting Agency.
29

30 This guarantee is supplemental to and does not limit or affect the requirements that
31 the Contractor's work comply with the requirements of the Contract or any other legal
32 rights or remedies of the Contracting Agency.
33

34 **1-05.13 Superintendents, Labor and Equipment of Contractor**
35 **(August 14, 2013 APWA GSP)**

36 *Delete the sixth and seventh paragraphs of this section.*
37

38 **1-05.14 Cooperation with Other Contractors**

39 *Supplement this section with the following:*
40

41 **(March 13, 1995 WSDOT GSP)**

42 It is anticipated that the following work adjacent to or within the limits of this project will
43 be performed by others during the course of this project and will require coordination
44 of the work:
45

46 Sound Transit is currently constructing improvements along the MLK Way, Division
47 Avenue, and Stadium Way corridors. Contractor shall coordinate traffic control with
48 City staff to ensure that this project's traffic control operations do not conflict with the
49 Sound Transit Light Rail Project. Coordination with City staff can occur during the
50 weekly progress meeting.
51

1 **1-05.15 Method of Serving Notices**
2 **(March 25, 2009 APWA GSP)**

3 *Revise the second paragraph to read:*
4

5 All correspondence from the Contractor shall be directed to the Project Engineer. All
6 correspondence from the Contractor constituting any notification, notice of protest,
7 notice of dispute, or other correspondence constituting notification required to be
8 furnished under the Contract, must be in paper format, hand delivered or sent via mail
9 delivery service to the Project Engineer's office. Electronic copies such as e-mails or
10 electronically delivered copies of correspondence will not constitute such notice and
11 will not comply with the requirements of the Contract.
12

13 *Add the following new section:*
14

15 **1-05.16 Water and Power**
16 **(October 1, 2005 APWA GSP)**
17

18 The Contractor shall make necessary arrangements, and shall bear the costs for
19 power and water necessary for the performance of the work, unless the Contract
20 includes power and water as a pay item.
21

22 *Add the following new section:*
23

24 **1-05.19 Project Management Communications**
25 **(March 16, 2018 Tacoma GSP)**
26

27 **1-05.19(1) Summary**
28

29 The Contractor shall use the Internet web-based project management
30 communications tool, e-Builder® ASP software, and protocols included in that
31 software during this project. The use of project management communications as
32 herein described does not replace or change any contractual responsibilities of the
33 participants.
34

35 User registration, electronic and computer equipment, and internet connections are
36 the responsibility of each project participant.
37

38 Nothing in this specification or the subsequent communications supersedes the
39 parties' obligations and rights for copyright or document ownership as established by
40 the Contract Documents. The use of CAD files, processes, or design information
41 distributed in this system is intended only for the project specified herein.
42

43 **1-05.19(2) Training & Support**
44

45 A group training session scheduled by the Contracting Agency will be provided for the
46 Contractor at a City of Tacoma training facility. The training session duration is
47 generally 4 hours. The Contractor's e-Builder® users are required to attend the
48 scheduled training sessions that they are assigned to. Requests for specific scheduled
49 classes will be on a first come first served basis by availability.
50

1-05.19(3) Authorized Users

Access to the web site will be by individuals who are licensed users.

1. The City will provide the Contractor with up to four licensed user accounts for the duration of the project. The sharing of user accounts is prohibited.
2. Additional licensed user accounts may be purchased from e-Builder®.
3. Authorized users will be contacted via e-mail with a temporary user password. The user shall update the required information at their first log-in and be responsible for proper password protection.
4. Only entities with a direct Contract with the Contracting Agency will be allowed to be an authorized user.

1-05.19(4) Communications

The use of fax, email and courier communication for this project is discouraged in favor of using e-Builder® to send messages. Communication functions are as follows:

1. Document Integrity and Revisions: Documents, comments, drawings and other data posted to the system remain a permanent component of the project. The originator, time and date are recorded for each document submitted to the system. Submitting a new document or record with a unique ID, originator, and time stamp is the method used to make modifications or corrections.
2. Document Security: The system provides a method for communication of documents. Documents allow security group assignment to respect the contractual parties' communication with the exception that the Contracting Agency Administrative Users have access to everything. **DO NOT POST PRIVATE OR CONFIDENTIAL ITEMS IN THE DATABASE.**
3. Notifications and Distribution: Document distribution to project members may be accomplished both within the e-Builder® system and via email depending on user settings. Project document distribution to parties outside of the project communication system may be accomplished by secure email of outgoing documents and attachments, readable by a standard email client.
4. Except for paper documents which require original signatures and large format documents (greater than 11 x 17 inches), all other documents shall be submitted by transmission in electronic form to the e-Builder® web site by licensed users.
 - a. Large format documents may be transmitted by hardcopy and electronically via e-Builder® as otherwise agreed, or as otherwise noted in the specifications.
 - b. Electronic processes and document types that shall be managed via e-Builder® include, but are not limited to:
 - i. Request for Information (RFI)
 - ii. Change Order (CO)
 - iii. Submittals
 - iv. Transmittals, including record of documents and materials delivered in hard copy
 - v. Meeting Minutes
 - vi. Application for Payments
 - vii. Review Comments
 - viii. Inspector's Daily Field Reports (IDR)
 - ix. Construction Photographs

- x. Drawings
- xi. Supplemental Sketches
- xii. Schedules
- xiii. Specifications
- xiv. Inspection Reports
- xv. Survey Requests
- xvi. TV Inspection Requests

1-05.19(5) Record Keeping

1. The Contracting Agency, their representatives, and the Contractor shall respond to electronic documents received from e-Builder® and consider them as if received in paper document form.
2. The Contracting Agency, their representatives, and the Contractor reserve the right to reply or respond through e-Builder® to documents actually received in paper document form.
3. The following are examples of paper documents which may require an original signature:
 - a. Contract
 - b. Change Orders
 - c. Application & Certificates for Payment
 - d. Force Account and Protested Force Account forms

1-05.19(6) Minimum Equipment Requirements

In addition to other requirements specified in this Section, the Contractor shall be responsible for providing suitable computers, necessary software and internet access to utilize e-Builder®. Furthermore, Microsoft Word, Microsoft Excel, and Adobe Acrobat Reader (compatible with current versions) are required. Contact e-Builder® for any additional equipment requirements and support at the following website: <http://www.e-builder.net/services/support>.

No separate payment will be made for the use of e-Builder®, as this will be considered incidental to the Contract. All costs incurred to carry out the requirements of utilizing and maintaining e-Builder®, including but not limited to, labor, training, equipment, and required software are the sole responsibility of the Contractor.

END OF SECTION

1
2 **1-06 CONTROL OF MATERIAL**
3

4 **1-06.1 Approval of Materials Prior To Use**
5 **(September 15, 2010 Tacoma GSP)**

6 *The first sentence is revised to read:*
7

8 All materials and equipment shall be submitted for review in accordance with section
9 1-05.3 of these special provisions.

10
11 For aggregates, the Contractor shall notify the Engineer of all proposed aggregates.
12 The Contractor shall use the Aggregate Source Approval (ASA) Database.

13
14 All equipment, materials, and articles incorporated into the permanent Work:

- 15
16 1. Shall be new, unless the Special Provisions or Standard Specifications permit
17 otherwise;
18
19 2. Shall meet the requirements of the Contract and be approved by the Engineer;
20
21 3. May be inspected or tested at any time during their preparation and use; and
22
23 4. Shall not be used in the Work if they become unfit after being previously approved.
24

25 **1-06.1(1) Qualified Products List (QPL)**

26 *This section is revised in its entirety to read:*
27

28 QPL's are not accepted by the City.
29

30 **1-06.1(2) Request for Approval of Material (RAM)**

31 *This section is deleted in its entirety:*
32

33 **END OF SECTION**
34

1
2 **1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC**

3
4 **1-07.1 Laws to be Observed**
5 **(October 1, 2005 APWA GSP)**

6 *Supplement this section with the following:*

7
8 In cases of conflict between different safety regulations, the more stringent regulation
9 shall apply.

10
11 The Washington State Department of Labor and Industries shall be the sole and
12 paramount administrative agency responsible for the administration of the provisions
13 of the Washington Industrial Safety and Health Act of 1973 (WISHA).

14
15 The Contractor shall maintain at the project site office, or other well-known place at
16 the project site, all articles necessary for providing first aid to the injured. The
17 Contractor shall establish, publish, and make known to all employees, procedures for
18 ensuring immediate removal to a hospital, or doctor's care, persons, including
19 employees, who may have been injured on the project site. Employees should not be
20 permitted to work on the project site before the Contractor has established and made
21 known procedures for removal of injured persons to a hospital or a doctor's care.

22
23 The Contractor shall have sole responsibility for the safety, efficiency, and adequacy
24 of the Contractor's plant, appliances, and methods, and for any damage or injury
25 resulting from their failure, or improper maintenance, use, or operation. The
26 Contractor shall be solely and completely responsible for the conditions of the project
27 site, including safety for all persons and property in the performance of the work. This
28 requirement shall apply continuously, and not be limited to normal working hours. The
29 required or implied duty of the Engineer to conduct construction review of the
30 Contractor's performance does not, and shall not, be intended to include review and
31 adequacy of the Contractor's safety measures in, on, or near the project site.

32
33 **1-07.2 State Taxes**
34 **(January 6, 2015 TACOMA GSP)**

35 *Supplement this section with the following:*

36
37 Washington State Department of Revenue Rules 170 and 171 shall apply as shown
38 in the Proposal and per Section 1-07.2 of the WSDOT and APWA Standard
39 Specifications for Road, Bridge, and Municipal Construction.

40
41 **1-07.9 Wages**

42
43 **1-07.9(5) Required Documents**
44 **(March 1, 2004 Tacoma GSP)**

45 *The first sentence of the third paragraph is revised to read:*

46
47 Weekly certified payrolls shall be submitted for the Contractor and all lower tier
48 subcontractors or agents.

1 *This section is supplemented with the following:*

2
3 Where fringe benefits are paid in cash, certified payrolls shall include the fringe benefit
4 dollar amount paid to each employee for each employee classification.

5
6 Where fringe benefits are paid into approved plans, funds, or programs, the amount of
7 the fringe benefits shall be identified in the "Benefit Distribution" section of the Certified
8 Payroll Affirmation form.

9
10 **1-07.15 Temporary Water Pollution/Erosion Control**
11 **(March 23, 2010 Tacoma GSP)**

12 *This section is supplemented with the following:*

13
14 Stormwater or dewatering water that has come in contact with concrete rubble,
15 concrete pours, or cement treated soils shall be maintained to pH 8.5 or less before it
16 is allowed to enter waters of the State or the City stormwater system. If pH exceeds
17 8.5, the Contractor shall immediately discontinue work and initiate treatment according
18 to the plan to lower the pH. Work may resume, with treatment, once the pH of the
19 stormwater is 8.5 or less or it can be demonstrated that the runoff will not reach surface
20 waters or the City stormwater system.

21
22 High pH process water shall not be discharged to waters of the State or the City
23 stormwater system. Unless specific measures are identified in the Special Provisions,
24 high pH water may be infiltrated, dispersed in vegetation or compost, or discharged to
25 a sanitary sewer system. Disposal shall be in accordance with the City of Tacoma
26 Surface Water Management Manual or to City wastewater system with proper
27 approval. Water being infiltrated or dispersed shall have no chance of discharging
28 directly to waters of the State or the City stormwater system, including wetlands or
29 conveyances that indirectly lead to waters of the State. High pH process water shall
30 be treated to within a range of 6.5 to 8.5 pH units prior to infiltration to ensure the
31 discharge does not cause a violation of groundwater quality standards. If water is
32 discharged to the sanitary sewer, the Contractor shall provide a copy of permits and
33 requirements for placing the material into a sanitary sewer system prior to beginning
34 the work. Process water may be collected and disposed of by the Contractor off the
35 project site. The Contractor shall provide a copy of the permit for an approved waste
36 site for the disposal of the process water prior to the start of work that generates the
37 process water. A Special Approved Discharge permit shall be required for all
38 discharges to the sanitary sewer system.

39
40 **1-07.15(1) Spill Prevention, Control and Countermeasures Plan**
41 **(February 9, 2011 Tacoma GSP)**

42 *This section is revised to read:*

43
44 The Contractor shall prepare a project-specific spill prevention, control, and
45 countermeasures plan (SPCC Plan) that will be used for the duration of the project.
46 The Contractor shall submit the plan to the Project Engineer no later than the date of
47 the preconstruction conference. No on-site construction activities may commence until
48 the Contracting Agency accepts an SPCC Plan for the project.

49
50 The SPCC Plan shall address all fuels, petroleum products, hazardous materials, and
51 other materials as defined in Chapter 447 of the WSDOT Environmental Procedures

Manual (M 31-11). Occupational safety and health requirements that may pertain to SPCC Plan implementation are contained in, but not limited to, WAC 296-824 and WAC 296-843.

Implementation Requirements

The SPCC Plan shall be updated by the Contractor throughout project construction so that the written plan reflects actual site conditions and practices. The Contractor shall update the SPCC Plan at least annually and maintain a copy of the updated SPCC Plan on the project site. All project employees shall be trained in spill prevention and containment, and they shall know where the SPCC Plan and spill response kits are located and have immediate access to them.

If hazardous materials are encountered or spilled during construction, the Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. The Contractor shall supply and maintain spill response kits of appropriate size within close proximity to hazardous materials and equipment.

The Contractor shall implement the spill prevention measures identified in the SPCC Plan before performing any of the following:

1. Placing materials or equipment in staging or storage areas.
2. Refueling, washing, or maintaining equipment.
3. Stockpiling contaminated materials.

SPCC Plan Element Requirements

The SPCC Plan shall set forth the following information in the following order:

1. Responsible Personnel

Identify the name(s), title(s), and contact information, including a 24/7 emergency contact number, for the personnel responsible for implementing and updating the plan, including all spill responders.

2. Spill Reporting

List the names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a spill. The City of Tacoma contact will be the Wastewater Treatment Plant Operations number at 253.591.5595 and the City Source Control Spill Response number at 253.502.2222.

3. Project and Site Information

Describe the following items:

- A. The project Work.
- B. The site location and boundaries.
- C. The drainage pathways from the site, including both stormwater and sanitary conveyance pathways.
- D. Nearby waterways and sensitive areas and their distances from the site.

1 4. Potential Spill Sources

2 Describe each of the following for all potentially hazardous materials brought or
3 generated on-site (including materials used for equipment operation, refueling,
4 maintenance, or cleaning):

5 A. Name of material and its intended use.

6 B. Estimated maximum amount on-site at any one time.

7 C. Location(s) (including any equipment used below the ordinary high water line)
8 where the material will be staged, used, and stored and the distance(s) from
9 nearby waterways and sensitive areas.

10 D. Decontamination location and procedure for equipment that comes into contact
11 with the material.

12 E. Disposal procedures.

13 F. Include a Material Safety Data Sheet (MSDS) for each potentially hazardous
14 material.

15
16 5. Pre-Existing Contamination

17 Describe any pre-existing contamination and contaminant sources (such as buried
18 pipes or tanks) in the project area that are described in the Contract documents.
19 Identify equipment and work practices that will be used to prevent the release of
20 contamination.

21
22 6. Spill Prevention and Response Training

23 Describe how and when all personnel (including refueling Contractors and
24 Subcontractors) will be trained in spill prevention, containment, and response in
25 accordance with the Plan. Describe how and when all spill responders will be
26 trained in accordance with WAC 296-824.

27
28 7. Spill Prevention

29 Describe the following items:

30
31 A. Spill response kit contents and location(s).

32 B. Security measures for potential spill sources.

33 C. Secondary containment practices and structures for all containers to handle
34 the maximum volume of potential spill of hazardous materials.

35 D. Methods used to prevent stormwater from contacting hazardous materials.

36 E. Site inspection procedures and frequency.

37 F. Equipment and structure maintenance practices.

38 G. Daily inspection and cleanup procedures that ensure all equipment used below
39 the ordinary high water line is free of all external petroleum-based products.

40 H. Refueling procedures for equipment that cannot be moved from below the
41 ordinary high water line.

42
43 8. Spill Response

44 Outline the response procedures the Contractor will follow for each scenario listed
45 below. Include a description of the actions the Contractor shall take and the
46 specific on-site spill response equipment that shall be used to assess the spill,
47 secure the area, contain and eliminate the spill source, and clean up and dispose
48 of spilled and contaminated material.

49
50 Response procedures shall be outlined in the Spill Response section and shall
51 include notification to the City of Tacoma Wastewater Treatment Plant Operations

number at 253.591.5595 and the City Source Control Spill Response number at 253.502.2222.

- A. A spill of each type of hazardous material at each location identified in 4, above.
- B. Stormwater that has come into contact with hazardous materials.
- C. Drainage pathways from the site, including both stormwater and sanitary conveyance pathways.
- D. A release or spill of any unknown pre-existing contamination and contaminant sources (such as buried pipes or tanks) encountered during project Work.
- E. A spill occurring during Work with equipment used below the ordinary high water line.

If the Contractor will use a Subcontractor for spill response, provide contact information for the Subcontractor under item 1 (above), identify when the Subcontractor will be used, and describe actions the Contractor shall take while waiting for the Subcontractor to respond.

9. Project Site Map

Provide a map showing the following items:

- A. Site location and boundaries.
- B. Site access roads.
- C. Drainage pathways from the site.
- D. Nearby waterways and sensitive areas.
- E. Hazardous materials, equipment, and decontamination areas identified in 4, above.
- F. Pre-existing contamination or contaminant sources described in 5, above.
- G. Spill prevention and response equipment described in 7 and 8, above.

10. Spill Report Forms

Provide a copy of the spill report form(s) that the Contractor will use in the event of a release or spill.

Payment

Payment will be made in accordance with Section 1-04.1 for the following Bid item when it is included in the Proposal:

“SPCC Plan,” lump sum.

When the written SPCC Plan is accepted by the Contracting Agency, the Contractor shall receive 50-percent of the lump sum Contract price for the plan.

The remaining 50-percent of the lump sum price will be paid after the materials and equipment called for in the plan are mobilized to the project.

The lump sum payment for “SPCC Plan” shall be full pay for:

- 1. All costs associated with creating the accepted SPCC Plan.
- 2. All costs associated with providing and maintaining the on-site spill prevention equipment described in the accepted SPCC Plan.

- 1
2 3. All costs associated with providing and maintaining the on-site standby spill
3 response equipment and materials described in the accepted SPCC Plan.
4
5 4. All costs associated with implementing the spill prevention measures identified in
6 the accepted SPCC Plan.
7
8 5. All costs associated with updating the SPCC Plan as required by this Specification.
9

10 As to other costs associated with releases or spills, the Contractor may request
11 payment as provided for in the Contract. No payment shall be made if the release or
12 spill was caused by or resulted from the Contractor's operations, negligence, or
13 omissions.
14

15 **1-07.16 Protection and Restoration of Property**

16 17 **1-07.16(1) Private/Public Property** 18 **(January 13, 2011 Tacoma GSP)**

19 *This section is supplemented with the following:*
20

21 Stockpiling in City of Tacoma right-of-way or on existing or new improvements shall
22 not occur unless approved by the Engineer. Stockpiling shall not be allowed within
23 existing planter strips or withing Wright Park. All stockpile sites shall be restored to as
24 good or better condition.
25

26 The Contractor shall contact all property owners and tenants in the vicinity of this
27 project, via newsletter/mailling, a minimum of one (1) week prior to start of construction.
28 The Contractor shall submit a draft of the property owner notification prior to
29 posting/mailling.
30

31 The newsletter/mailling shall advise the owners and tenants of the construction
32 schedule and indicate the Contractor's name, contact person, and telephone numbers.
33

34 **(*****)**

35 *Supplement this section with the following:*
36

37 **Property Owner Notification Prior to Starting Construction**

38 The Contractor shall contact all property owners and tenants in the vicinity of this
39 project, via newsletter/mailling, a minimum of one (1) week prior to start of City of
40 Tacoma Holiday Moratorium. The Contractor shall submit a draft of the property owner
41 notification prior to posting/mailling.
42

43 The newsletter/mailling shall advise the owners and tenants of the construction
44 schedule, right of way impacts, traffic/parking restrictions, and private property impacts
45 and indicate the Contractor's name, contact person, and telephone numbers.
46

47 **Property Owner Notification Prior to Impacting Private Improvements**

48 Contractor shall be required to notify each property owner prior to impacting private
49 improvements (whether on private or public right of way), a minimum of 7 working days
50 prior to start of removal of private improvements.
51

Coordination with Tacoma General Hospital MultiCare Staff

Contractor shall be responsible for scheduling and attending a weekly progress meeting with MultiCare staff, Cascade Regional Blood Services staff, the City Construction Inspector, the City Project Manager, and other City staff as appropriate when working adjacent to the Tacoma General Hospital. MultiCare and Cascade Regional Blood Services staff contact information is below:

Gar Johnson, Supervisor-Engineering Operations

gwjohnson@multicare.org

O: (253) 403-1297

C: (206) 384-0249

Matt Counas, Manager-Engineering Services

Matt.counas@multicare.org

O: (253) 403-4541

C: (253) 261-5528

Randy Cline, Facilities Maintenance (Cascade Regional Blood Services)

randyc@crbs.net

O: (253) 383-2553 Ext. 205

C: (360) 509-9244

Topics to be discussed during these weekly meetings include status of overall project; anticipated Work Zone (s) for the upcoming week; anticipated traffic control elements, lane closures, and detours; Weekly Look-Ahead Schedule; etc.

1-07.16(2) Vegetation Protection and Restoration

(*****)

This section is supplemented with the following:

The Contractor shall notify the Engineer of any potential conflicts between existing tree limbs and equipment to avoid damage to existing tree canopies. Any pruning activity required to complete the Work as specified shall be performed at the direction of the City Arborist.

Roots larger than 1½ inches in diameter shall not be cut unless directed to do so by the City Arborist. The City Arborist may recommend root shaving or pruning prior to placement of backfill material and/or topsoil. Only sterilized and sharpened chainsaws, handsaws or pruners shall be used to perform these tasks and this work shall be performed under the supervision of the City Arborist. All work shall be performed to ensure significant tree roots are not damaged.

The Contractor shall ensure adequate soil moisture throughout the duration of the work to maintain tree health. Roots exposed by trenching or other construction activities shall be covered and kept moist to protect and prevent them from drying out, by wrapping with heavy, moist material, such as burlap or canvas. The material must be kept moist until the trench is backfilled. Trenches dug by machines adjacent to trees with roots less than 1½ inches in diameter shall have severed roots cleanly cut. Trenches with exposed tree roots shall be backfilled within 24 hours unless adequately protected by moist material as approved by the Engineer. All material and fastenings used to cover the roots shall be removed before backfilling.

1 **Contractor shall protect all trees within the active Work Zone using reusable tree**
2 **protection per City of Tacoma Standard Plan LS-11.**

3
4 Contractor shall coordinate directly with the City Construction Inspector to get approval
5 prior to doing any vegetation removal or trimming.
6

7 All costs for protecting existing trees, coordinating with the City Arborist, and cutting
8 and treating roots as specified herein or as directed by the City Arborist shall be
9 considered incidental to the Work and will not be measured for payment.
10

11 **(*****)**

12 *Supplement this section with the following:*

13
14 Contractor shall be required to provide notice to the property owner a minimum seven
15 (7) calendar days in advance of starting vegetation removal/relocation procedures.
16

17 **1-07.17 Utilities and Similar Facilities**

18 **(March 7, 2017 Tacoma GSP)**

19 *The first paragraph is supplemented with the following:*

20
21 Public and private utilities or their Contractors will furnish all work necessary to adjust,
22 relocate, replace, or construct their facilities unless otherwise provided for in the Plans
23 or these Special Provisions. Such adjustment, relocations, replacement, or
24 construction will be done within the time for performance of this project. The
25 Contractor shall coordinate their work with such adjustment, relocation, or replacement
26 of utility work. This may require the Contractor to phase their work in a manner that
27 will allow for the utility work.
28

29 The Contractor shall coordinate their work with all utilities and other organizations,
30 which have to adjust or revise their facilities within the project area. These may
31 include, but are not limited to:
32

- 33 • City of Tacoma Light Division, Contact: Kevin Kelley, phone: (253) 502-8229
- 34 • City of Tacoma Water Division, Contact: Kimberly Baard, phone: (253) 396-3317
- 35 • City of Tacoma Traffic Division, Signal/Streetlight Shop, phone: (253) 591-5287
- 36 • CLICK! Network, Contact: Ken Mathes, phone: (253) 502-8851
- 37 • Puget Sound Energy, Contact: Mike Klapperich, Electric, phone: (253) 313-3790
- 38 OR Amber Uhls, Gas, phone: (253) 476-6137
- 39 • CenturyLink, Contact: Eric Charity, phone: (206) 733-8871
- 40 • Comcast, Contact: Todd Gallant, phone: (253) 878-4955
- 41 • AT&T Broadband Information Services, Contact: Dan McGeough, phone: (425)
- 42 896-9830
- 43 • Level 3 Communications, Level3NetworkRelocations@Level3.com
- 44 • One-Number Locator Service "One Call System" telephone **1-800-424-5555**
- 45 • Verizon, Contact: David Lacombe, phone: (206) 305-5366
- 46 • MCI Metro Utility, Contact: Brad Landis, phone: (425) 229-3123

47
48 If the Contractor plans to excavate or trench within ten (10) feet of any utility pole or
49 other electric or water utility structure owned by the City of Tacoma, the Contractor
50 shall contact the City of Tacoma, Department of Public Utilities, Field Coordinator,

1 telephone number 502-8044, and arrange for an inspection before proceeding. The
2 Contractor shall perform, at the Contractor's expense, such additional work as is
3 required to protect the pole or structure from subsidence. The Contractor may be
4 directed to suspend work at the site of any such excavation until such utility structures
5 are adequately protected.

6
7 Garbage, recycling, and yard waste pick up within the project limits is on Friday.

8
9 (*****)

10 *Supplement this section with the following:*

11
12 Contractor shall be responsible for coordinating and scheduling with utility providers
13 to either hold or temporarily disconnect/reconnect overhead utility drops that will
14 interfere with trenching operations. All coordination with City of Tacoma and affected
15 utility providers shall be considered incidental to the project and will not be measured
16 for payment.

17
18 Contractor shall be aware that excavation for public utilities will be in close proximity
19 to existing underground private utilities, and at times existing gas runs parallel to
20 trenching required for this project. Contractor shall be responsible for determining the
21 locations of all existing private utilities and coordinating with utility providers to
22 hold/secure their utilities in the event private utilities are uncovered during excavation.

23
24 (*****)

25 *Supplement this section with the following:*

26
27 Contractor shall be responsible for coordinating directly with TPU Power before
28 excavating in the vicinity of the power duct bank on S 11th Street. The TPU contact
29 information is below:

30
31 Sean Veley, Substation Maintenance Supervisor

32 sveley@cityoftacoma.org

33 O: (253) 502-8713

34 C: (253) 208-5030

35
36 Contractor shall Contact TPU Power a minimum of 10 Working days prior to beginning
37 excavation around the duct bank.

38
39 **1-07.18 Public Liability and Property Damage Insurance**

40 *Delete this section in its entirety, and replace it with the following:*

41
42 **1-07.18 Insurance**
43 **(December 17, 2019 Tacoma GSP)**
44

45 During the course and performance of the services herein specified, the contractor will
46 maintain the insurance coverage in the amounts and in the manner specified in the
47 City of Tacoma Insurance Requirements as is applicable to the services and
48 deliverables provided under this contract. The City of Tacoma Insurance
49 Requirements document is fully incorporated herein by reference.
50

Failure by the City to identify a deficiency in the insurance documentation provided by the Contractor or failure of the City to demand verification of coverage or compliance by the Contractor with these insurance requirements shall not be construed as a waiver of the Contractor's obligation to maintain such insurance.

1-07.23 Public Convenience and Safety

1-07.23(1) Construction Under Traffic (May 2, 2017 APWA GSP)

Revise the third sentence of the second paragraph to read:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired; if approved by the Contracting Agency activating pedestrian recall timing or other accommodation may be allowed during construction.

(March 1, 2004 Tacoma GSP)

This section is supplemented with the following:

The following special traffic requirements shall be adhered to during all phases of construction:

South J Street, Earnest S Brazill Street (S 12th Street), S 11th Street, S 9th Street, Yakima Avenue, South I Street, 6th Avenue, and Division Avenue are arterials.

S 12th Street (Earnest S Brazill Street)

- Maintain eastbound traffic through the work zone where the pipe crew and operator are working. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday. When westbound traffic is not able to access southbound/northbound South J Street from Earnest S Brazill Street/South 12th Street, as dictated by work stage and work zone extent/temporary traffic controls, then the traffic may be detoured via "soft closure" at the Yakima Avenue to the east and a hard closure/detail prior to the South J Street intersection.
- Full closure of Earnest S Brazill/South 12th Street for any work or combination of work is not permitted at any time.

South J Street

- Sanitary Sewer Mainline Construction: Maintain southbound traffic through the work zone where the pipe crew and operator are working. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday.
- Water Main Construction: Maintain northbound traffic through the work zone where the pipe crew and operator are working. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday.
- Full closure of South J Street for any work or combination of work is not permitted at any time.

S 7th Street

- May be closed to through traffic. Local traffic and Refuse Collection access (or alternate collection provisions) shall be maintained at all times. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday.

Yakima Avenue / South I Street Transition (south of 6th Avenue)

- Maintain two-lane, two-way traffic through the work zone so long as any potential corresponding work at the 6th Avenue intersection is conducive to the traffic flow/positioning where the pipe crew and operator are working. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday.
- Full closure of Yakima Avenue/South I Street for any work or combination of work is not permitted at any time.

South I Street

- Between 6th Avenue and S 4th Street: Maintain southbound traffic through the work zone where the pipe crew and operator are working. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday. When northbound traffic is not able to use the roadway, then that traffic may be detoured via “soft closure” at the 6th Avenue intersection to the south and at a hard closure/detour at a local access/circulation point prior to the work zone closure.
- Between S 4th Street and Division Avenue: Maintain northbound traffic through the work zone where the pipe crew and operator are working. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday. When southbound traffic is not able to use the roadway, then that traffic may be detoured via “soft closure” at the Division Avenue intersection to the north and at a hard closure/detour at a local access/circulation point prior to the work zone closure.

Intersections:

In addition to the restrictions/allowances described above, the following must also be adhered to and integrated into the work and traffic control plans.

- S 11th Street / South J Street Intersection: Maintain two-lane, two-way traffic (east/westbound on S 11th Street in separate lanes of no less than 10-foot clear width and appropriate-for-the-conditions channelized delineation) through the work zone where the pipe crew and operator are working. Directional closure as specified above will be allowed on South J Street. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday.
- S 9th Street / South J Street Intersection: Maintain two-lane, two-way traffic (east/westbound on S 9th Street in separate lanes of no less than 10-foot clear width and appropriate-for-the-conditions channelized delineation) through the work zone where the pipe crew and operator are working. Directional closure as specified above will be allowed on South J Street. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday.
- 6th Avenue / South I Street Intersection: Maintain two-lane, two-way traffic (east/westbound on 6th Avenue in separate lanes of no less than 10-foot clear width and appropriate-for-the-conditions channelized delineation) through the work zone where the pipe crew and operator are working. Directional closure as specified above will be allowed on South I Street. Contractor shall reopen the vehicle travel lanes at the conclusion of each workday.

Maintaining two-way, two-lane traffic (east/westbound in separate lanes of adequate width and channelized delineation) through the intersections and through Yakima Avenue / South I Street Transition will likely require the Contractor to reposition equipment to dig downhill so as not to obstruct traffic.

- 1 • Driveway on South I Street (Approximately STA 414+45): This driveway is
2 used for deliveries and hospital/medical office patient arrival/departure and
3 must be maintained open at all times. In order to do so, the Contractor shall
4 have on-hand steel sheets or other approved materials to cover the trench to
5 allow vehicle access (and to protect from the open trench/work zone) while
6 working immediately adjacent to this driveway.
- 7 • Contractor shall not be allowed to impact more than one arterial/arterial
8 intersection at any given time and shall only occupy a work zone
9 commensurate with the activities planned for the workday.

10 **Other:**

- 11 • Contractor will be allowed to keep the parking area within the work zone closed
12 overnight.
- 13 • Contractor shall not be allowed to impact more than one side street/driveway
14 along South I Street at any given time.
- 15 • All arterial-involved closures or traffic revisions shall be accompanied by
16 advance notification (minimum 7 days) to City departments, other agencies
17 (including Pierce Transit), and affected businesses; advance notice (by a
18 minimum of 7 days) to the traveling public via PCMS; and a signed detour
19 utilizing pre-approved arterial roadways.
- 20 • 6th Avenue, S 9th Street, S 11th Street, and Earnest S Brazill Street are used by
21 Pierce Transit within the project area.
- 22 • South J Street is the arterial detour for any construction work occurring (and
23 expected to be active at the same time as the subject project) along the Martin
24 Luther King Jr Way corridor. Contractor shall be required to coordinate with
25 the Sound Transit Light Rail project corridor and City staff when developing
26 work and traffic control plans. See Section 1-05.14 for additional information.
- 27 • Even if adjacent roadway vehicle traffic is closed/restricted, there shall be at
28 least one parallel pedestrian route (equivalent accessibility - either present or
29 temporarily provided - to the pre-existing conditions) that is available to
30 traverse along the closed roadway and to cross the roadway under
31 construction at a minimum of one unmarked/marked intersection crosswalk
32 when work is at/near any given intersection. If any pedestrian route cannot be
33 maintained, then a signed pedestrian detour route must be established and
34 approved by the City.
- 35 • Any demolition, or closure of pedestrian accessibility, at a given corner of an
36 intersection must be limited to that given corner, with the remaining three
37 corners at the intersection (at a minimum) being used to facilitate a pedestrian
38 detour, until full accessibility or an accessible connection with at least one other
39 corner can be re-established. Any temporary pedestrian access path/route
40 that may be employed to satisfy this requirement shall provide equivalent to,
41 or better, accessibility than the unavailable path/route in accordance with the
42 Americans with Disabilities Act and the Proposed Accessibility Guidelines for
43 Pedestrian Facilities in the Public Right-of-Way (PROWAG).

44
45 Contractor must provide proper advance notice to the appropriate City of Tacoma
46 Department as identified in the City of Tacoma Traffic Control Handbook prior to any
47 traffic revisions.
48

1 If the Engineer determines the permitted closure hours adversely affect traffic, the
2 Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in
3 writing of any change in the closure hours.
4

5 All trench sections within paved roadways shall be restored with Temporary Pavement
6 Patch. The Temporary Pavement Patch shall be conducted concurrently with sewer
7 pipeline construction. All steel plates used to cover open trenches within the roadway
8 where traffic will be crossing or driving over the steel plates shall be properly
9 secured/pinned and have advance signing notification of the roadway conditions. All
10 steel plates shall be non-skid and will not be allowed to remain in place during non-
11 working days.
12

13 To minimize the disruption to access to adjacent properties, and to Pierce Transit
14 operations, the lane closure area shall be limited to that area of active work and
15 necessary for appropriate lane closure tapers. The Contractor shall stage work to
16 maintain access to and egress from all properties at all times.
17

18 A safe pedestrian access shall be provided at all times through the project area. All
19 lane closures shall be coordinated with the adjacent businesses, other contractors
20 working within the project vicinity, local transit agencies and the City.
21

22 Where, in the opinion of the Engineer, parking is a hazard to through traffic or to the
23 construction work, parking may be restricted either entirely or during the time when it
24 creates a hazard. Signs for restricting parking shall be approved by the City and
25 placed by the Contractor at least 72 hours in advance of the start of the parking
26 restriction. The Contractor shall be responsible for and shall maintain all such signs.
27 The replacement of signs restricting parking shall be as approved by the Engineer.
28

29 The Contractor shall notify all property owners and tenants of detours, street and alley
30 closures, driveway closures, access restrictions, parking restrictions, and/or other
31 restrictions that may interfere with their access. Notification shall be at least seven
32 calendar days in advance for all affected properties.
33

34 Emergency traffic, such as police, fire, and disaster units, shall be provided access at
35 all times. In addition, the Contractor shall coordinate Contractor activities with all
36 disposal firms and transit bus service that may be operating in the project area.
37

38 If street closures or lane restrictions, not provided for in the Specifications, are allowed
39 subsequent to award of the contract, an equitable adjustment of the Contract amount
40 shall be negotiated.
41

42 It is the intent of the Contract to effectively prevent the deposition of debris on streets
43 in areas of public traffic or where such debris may be transported into a drainage
44 system. When construction operations are such that debris from the work is deposited
45 on the streets, the Contractor shall, at a minimum, remove on a daily basis any
46 deposits or debris which may accumulate on the roadway surface. Should daily
47 removal be insufficient to keep the streets clean, the Contractor shall perform removal
48 operations on a more frequent basis. If the Engineer determines that a more frequent
49 cleaning is impractical or if the Contractor fails to keep the streets free from deposits
50 and debris resulting from the work, the Contractor shall, upon order of the Engineer,
51 provide facilities for and remove all deposits from the tires or between wheels before

trucks or other equipment will be allowed to travel over paved streets. Should the Contractor fail or refuse to clean the streets in question, or the trucks or equipment in question, the Engineer may order the work suspended at the Contractor's risk until compliance with Contractor's obligations is assured, or the Engineer may order the streets in question cleaned by others and such costs incurred by the City in achieving compliance with these contract requirements, including cleaning of the streets, shall be deducted from moneys due or to become due the Contractor on monthly estimate. The Contractor shall have no claim for delay or additional costs should the Engineer choose to suspend the Contractor's work until compliance is achieved.

1-07.23(2) Construction and Maintenance of Detours
(April 1, 2018 Tacoma GSP)

This section is supplemented with the following:

Detour signing during any allowed road closures shall be in accordance with Detour Plans, when included in the Contract Documents. When plans are not included in the Contract Documents, the Contractor shall submit plans for detours in accordance with the "Manual on Uniform Traffic Control Devices (MUTCD)". In addition, where the Contractor believes an alternate plan will safely and adequately maintain vehicular and pedestrian traffic, the Contractor may submit alternate plans to those for traffic control and detours required by MUTCD or contract documents. Such alternate plans must comply with the MUTCD and shall be in writing and submitted to the Engineer at least fifteen (15) days in advance of their intended use. In general, detouring of arterial traffic must be accomplished on streets designated as City Arterials. Detouring of arterial traffic on non-arterial streets will not be allowed. The acceptance of any alternate plan shall be entirely at the discretion of the Engineer and the Contractor shall have no claim by reason of a plan being rejected or modified, nor shall there be any additional payment by reason of using a substitute plan.

Separate from the traffic control plan review and approval process, the Contractor shall notify the Engineer five (5) working days in advance of implementation of any street closures/detours allowed under the Contract. Advance notice signing shall be placed a minimum of seven (7) calendar days prior to implementation of any street closure/detour.

A minimum of five (5) working days prior to any street closure, the Contractor shall notify all entities below:

Tacoma Fire Dept.	(253-591-5775)
Tacoma Police Dept.	(253-591-5932)
LESA Communications Center	(253-798-4721 - Opt.#2)
Tacoma Public Schools Transportation Office	(253-571-1853)
Pierce Transit	(253-581-8001)
Tacoma Environmental Services Solid Waste	(253-591-5544)
Tacoma Public Works Engineering Division	(253-591-5500)
Tacoma Public Works Streets and Grounds	(253-591-5495)

1 **1-07.24 Rights of Way**
2 **(July 23, 2015 APWA GSP)**

3 *Delete this section and replace it with the following:*
4

5 Street Right of Way lines, limits of easements, and limits of construction permits are
6 indicated in the Plans. The Contractor's construction activities shall be confined within
7 these limits, unless arrangements for use of private property are made.
8

9 Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of
10 way and easements, both permanent and temporary, necessary for carrying out the
11 work. Exceptions to this are noted in the Bid Documents or will be brought to the
12 Contractor's attention by a duly issued Addendum.
13

14 Whenever any of the work is accomplished on or through property other than public
15 Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any
16 easement agreement obtained by the Contracting Agency from the owner of the
17 private property. Copies of the easement agreements may be included in the Contract
18 Provisions or made available to the Contractor as soon as practical after they have
19 been obtained by the Engineer.
20

21 Whenever easements or rights of entry have not been acquired prior to advertising,
22 these areas are so noted in the Plans. The Contractor shall not proceed with any
23 portion of the work in areas where right of way, easements or rights of entry have not
24 been acquired until the Engineer certifies to the Contractor that the right of way or
25 easement is available or that the right of entry has been received. If the Contractor is
26 delayed due to acts of omission on the part of the Contracting Agency in obtaining
27 easements, rights of entry or right of way, the Contractor will be entitled to an extension
28 of time. The Contractor agrees that such delay shall not be a breach of contract.
29

30 Each property owner shall be given 48 hours notice prior to entry by the Contractor.
31 This includes entry onto easements and private property where private improvements
32 must be adjusted.
33

34 The Contractor shall be responsible for providing, without expense or liability to the
35 Contracting Agency, any additional land and access thereto that the Contractor may
36 desire for temporary construction facilities, storage of materials, or other Contractor
37 needs. However, before using any private property, whether adjoining the work or not,
38 the Contractor shall file with the Engineer a written permission of the private property
39 owner, and, upon vacating the premises, a written release from the property owner of
40 each property disturbed or otherwise interfered with by reasons of construction
41 pursued under this contract. The statement shall be signed by the private property
42 owner, or proper authority acting for the owner of the private property affected, stating
43 that permission has been granted to use the property and all necessary permits have
44 been obtained or, in the case of a release, that the restoration of the property has been
45 satisfactorily accomplished. The statement shall include the parcel number, address,
46 and date of signature. Written releases must be filed with the Engineer before the
47 Completion Date will be established.
48

49 **END OF SECTION**
50
51

1
2 **1-08 PROSECUTION AND PROGRESS**

3 *Add the following new section:*
4

5 **1-08.0 Preliminary Matters**
6 **(May 25, 2006 APWA GSP)**
7

8 **1-08.0(1 Preconstruction Conference**
9 **(October 10, 2008 APWA GSP)**
10

11 Prior to the Contractor beginning the work, a preconstruction conference will be held
12 between the Contractor, the Engineer and such other interested parties as may be
13 invited. The purpose of the preconstruction conference will be:

- 14 1. To review the initial progress schedule;
15 2. To establish a working understanding among the various parties associated or
16 affected by the work;
17 3. To establish and review procedures for progress payment, notifications, approvals,
18 submittals, etc.;
19 4. To establish normal working hours for the work;
20 5. To review safety standards and traffic control; and
21 6. To discuss such other related items as may be pertinent to the work.
22

23 The Contractor shall prepare and submit at the preconstruction conference the
24 following:

- 25 1. A breakdown of all lump sum items;
26 2. A preliminary schedule of working drawing submittals; and
27 3. A list of material sources for approval if applicable.
28

29 *Add the following new section:*
30

31 **1-08.0(2) Hours of Work**
32 **(March 3, 2008 Tacoma GSP)**
33

34 Except in the case of emergency or unless otherwise approved by the Contracting
35 Agency, the normal straight time working hours for the contract shall be any
36 consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. of a working day with a
37 maximum 1-hour lunch break and a 5-day work week. The normal straight time 8-hour
38 working period for the contract shall be established at the preconstruction conference
39 or prior to the Contractor commencing the work.
40

41 If a Contractor desires to perform work on holidays, Saturdays, Sundays, or before
42 7:00 a.m. or after 6:00 p.m. on any day, the Contractor shall apply in writing to the
43 Engineer for permission to work such times. Permission to work longer than an 8-hour
44 period between 7:00 a.m. and 6:00 p.m. is not required. Such requests shall be
45 submitted to the Engineer no later than noon on the working day prior to the day for
46 which the Contractor is requesting permission to work.
47

48 Permission to work between the hours of 9:00 p.m. and 7:00 a.m. during weekdays
49 and between the hours of 9:00 p.m. and 9:00 a.m. on weekends or holidays may also
50 be subject to noise control requirements. Approval to continue work during these
51 hours may be revoked at any time the Contractor exceeds the Contracting Agency's

1 noise control regulations or complaints are received from the public or adjoining
2 property owners regarding the noise from the Contractor's operations. The Contractor
3 shall have no claim for damages or delays should such permission be revoked for
4 these reasons.

5
6 Permission to work Saturdays, Sundays, holidays or other than the agreed upon
7 normal straight time working hours Monday through Friday may be given subject to
8 certain other conditions set forth by the Contracting Agency or Engineer. These
9 conditions may include but are not limited to: requiring the Engineer or such assistants
10 as the Engineer may deem necessary to be present during the work; requiring the
11 Contractor to reimburse the Contracting Agency for the costs in excess of straight-time
12 costs for Contracting Agency employees who worked during such times, on non
13 Federal aid projects; considering the work performed on Saturdays and holidays as
14 working days with regards to the contract time; and considering multiple work shifts as
15 multiple working days with respect to contract time even though the multiple shifts
16 occur in a single 24-hour period. Assistants may include, but are not limited to, survey
17 crews; personnel from the Contracting Agency's material testing lab; inspectors; and
18 other Contracting Agency employees when in the opinion of the Engineer, such work
19 necessitates their presence.

20
21 *Add the following new section:*

22
23 **1-08.0(3) Reimbursement for Overtime Work of Contracting Agency Employees**
24 **(September 29, 2009 Tacoma GSP)**

25
26 Where the Contractor elects to work on a Saturday, Sunday, or holiday, or longer than
27 an 8-hour work shift on a regular working day, as defined in the Standard
28 Specifications, such work shall be considered as overtime work. On all such overtime
29 work, city staff may be required at the discretion of the Engineer. In such case, the
30 Contracting Agency may deduct from amounts due or to become due to the Contractor
31 for the costs in excess of the straight-time costs for employees of the Contracting
32 Agency required to work overtime hours.

33
34 The Contractor by these specifications does hereby authorize the Engineer to deduct
35 such costs from the amount due or to become due to the Contractor.

36
37 **1-08.1 Subcontracting - D/M/WBE Reporting**
38 **(September 29, 2009 Tacoma GSP)**

39 *The eighth paragraph is revised to read:*

40
41 On all projects funded with Contracting Agency funds only, the Contractor shall certify
42 to the actual amounts paid Disadvantaged, Minority, or Women's Business Enterprise
43 firms that were used as subcontractors, lower tier subcontractors, manufacturers,
44 regular dealers, or service providers on the contract. This certification shall be
45 submitted to the Engineer, on the form provided by the Engineer, 20 calendar days
46 after physical completion of the contract.
47
48

1 **(May 17, 2018 APWA GSP, Option B)**

2 *Revise the ninth paragraph to read:*

3
4 The Contractor shall comply with the requirements of RCW 39.04.250, 39.76.011,
5 39.76.020, and 39.76.040, in particular regarding prompt payment to Subcontractors.
6 Whenever the Contractor withholds payment to a Subcontractor for any reason
7 including disputed amounts, the Contractor shall provide notice within 10 calendar
8 days to the Subcontractor with a copy to the Contracting Agency identifying the reason
9 for the withholding and a clear description of what the Subcontractor must do to have
10 the withholding released. Retainage withheld by the Contractor prior to completion of
11 the Subcontractors work is exempt from reporting as a payment withheld and is not
12 included in the withheld amount. The Contracting Agency's copy of the notice to
13 Subcontractor for deferred payments shall be submitted to the Engineer concurrently
14 with notification to the Subcontractor.

15
16 **1-08.4 Prosecution of Work**

17 *Delete this section and replace it with the following:*

18
19 **1-08.4 Notice to Proceed and Prosecution of Work**
20 **(July 23, 2015 APWA GSP)**

21
22 Notice to Proceed will be given after the contract has been executed and the contract
23 bond and evidence of insurance have been approved and filed by the Contracting
24 Agency. The Contractor shall not commence with the work until the Notice to Proceed
25 has been given by the Engineer. The Contractor shall commence construction
26 activities on the project site within ten days of the Notice to Proceed Date, unless
27 otherwise approved in writing. The Contractor shall diligently pursue the work to the
28 physical completion date within the time specified in the contract. Voluntary shutdown
29 or slowing of operations by the Contractor shall not relieve the Contractor of the
30 responsibility to complete the work within the time(s) specified in the contract.

31
32 When shown in the Plans, the first order of work shall be the installation of high visibility
33 fencing to delineate all areas for protection or restoration, as described in the Contract.
34 Installation of high visibility fencing adjacent to the roadway shall occur after the
35 placement of all necessary signs and traffic control devices in accordance with 1-
36 10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to
37 inspect the fence. No other work shall be performed on the site until the Contracting
38 Agency has accepted the installation of high visibility fencing, as described in the
39 Contract.

40
41 *Supplement this section with the following:*

42 **(*****)**

43
44 Excavation activities during pipeline construction shall be confined to a length of 150
45 feet at any one time during construction of the new utility pipes. The temporary asphalt
46 patch shall proceed concurrently with utility pipeline construction.

47
48 To minimize construction impacts to the general public and adjacent property owners,
49 the Contractor shall complete pipe replacement and temporary asphalt patch for a
50 complete city block prior to beginning operations on the subsequent city block. The
51 Contractor's active working area shall be limited to two blocks maximum. A block shall

1 be considered complete and no longer part of the active working area after the pipeline
2 and temporary pavement patch work has been inspected, tested, and accepted by the
3 Construction Inspector.

4
5 In order to minimize the duration of exposed soils to inclement weather conditions
6 during construction, the Contractor shall construct all temporary and permanent
7 surface replacement activities within three working days from the date of removal.
8 Upon removal of existing asphalt for pipeline construction, removal of curb and gutter,
9 sidewalk, and any other impervious surfaces, the Contractor shall protect / prevent
10 surface runoff from entering the exposed areas until such a time that the finish surface
11 improvement have been constructed and accepted by the Construction Inspector.

12
13 (*****)

14 *Supplement this section with the following:*

15
16 **City of Tacoma Holiday Moratorium**

17 When working within any Business District or the Downtown Core, City of Tacoma
18 prohibits any work that impacts vehicle traffic between Thanksgiving Day and New
19 Year's Day. (This project is located within the Downtown Core as well as the Hilltop
20 Business District).

21
22 The intent of this moratorium is to limit vehicle and pedestrian traffic obstructions within
23 and adjacent to the Downtown Core, and the Neighborhood Business Districts, to
24 maximize the public's access to local businesses.

25
26 The Tacoma Community and Economic Development Department (CEDD) has
27 concluded that this project represents minimal disruption to local traffic and therefore
28 the Contractor will be allowed to continue work on South I Street during the
29 moratorium, provided that the Contractor's construction and traffic control operations
30 do not unduly restrict vehicle and pedestrian traffic. No work will be allowed on South
31 J Street during the City of Tacoma Holiday Moratorium.

32
33 The Engineer and/or CEDD staff may rescind the decision to allow work during the
34 moratorium (or restrict hours of work or working area) if, at the sole discretion of the
35 Engineer or CEDD staff, it is determined that the Contractor's operations unduly affect
36 traffic in an adverse manner. The Engineer will notify the Contractor in writing of any
37 change in the work allowed during the moratorium.

38
39 Contractor shall notify property owners and tenants prior to the City of Tacoma Holiday
40 Moratorium per Section 1-07.16(1).

41
42 (*****)

43 *Supplement this section with the following:*

44
45 Contractor shall be required to start work at the north end of the site and shall be
46 required to complete all work on South I Street, including all pipe testing/inspection,
47 permanent pavement patch, and final restoration, before being allowed to start work
48 on S 7th Street or South J Street.

1 All work on South I Street shall be physically completed on or before March 31,
2 2022 in order to accommodate an upcoming Public Works project which will
3 conduct a grind/overlay on 6th Avenue and South I Street.
4

5 **1-08.5 Time for Completion**
6 **(March 16, 2016 Tacoma GSP)**

7 *Revise the third and fourth paragraphs to read:*
8

9 Contract time shall begin on the first working day following the Notice to Proceed Date.
10

11 Each working day shall be charged to the contract as it occurs, until the contract work
12 is physically complete. If substantial completion has been granted and all the
13 authorized working days have been used, charging of working days will cease. Each
14 week the Engineer will provide the Contractor a statement that shows the number of
15 working days: (1) charged to the contract the week before; (2) specified for the physical
16 completion of the contract; and (3) remaining for the physical completion of the
17 contract. The statement will also show the nonworking days and any partial or whole
18 day the Engineer declares as unworkable. Within 10 calendar days after the date of
19 each statement, the Contractor shall file a written protest of any alleged discrepancies
20 in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable
21 the Engineer to ascertain the basis and amount of time disputed. By not filing such
22 detailed protest in that period, the Contractor shall be deemed as having accepted the
23 statement as correct. If the Contractor is approved to work 10 hours a day and 4 days
24 a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked
25 would ordinarily be charged as a working day then the fifth day of that week will be
26 charged as a working day whether or not the Contractor works on that day.
27

28 *Revise the sixth paragraph to read:*
29

30 The Engineer will give the Contractor written notice of the completion date of the
31 contract after all the Contractor's obligations under the contract have been performed
32 by the Contractor. The following events must occur before the Completion Date can
33 be established:

- 34 1. The physical work on the project must be complete; and
 - 35 2. The Contractor must furnish all documentation required by the contract and
36 required by law, to allow the Contracting Agency to process final acceptance of the
37 contract. The following documents must be received by the Project Engineer prior
38 to establishing a completion date:
 - 39 a. Certified Payrolls (per Section 1-07.9(5)).
 - 40 b. Material Acceptance Certification Documents
 - 41 c. Reports of Amounts Credited as EIC Participation, as required by the Contract
42 Provisions.
 - 43 d. Final Contract Voucher Certification
 - 44 e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor
45 and all Subcontractors
 - 46 f. Property owner releases per Section 1-07.24
- 47

48 *This section is supplemented with the following:*

49 **(March 1, 2004 Tacoma GSP)**
50

51 This project shall be physically completed within 130 working days.

1
2 **1-08.9 Liquidated Damages**
3 **(August 14, 2013 APWA GSP)**

4 *Revise the fourth paragraph to read:*

5
6 When the Contract Work has progressed to Substantial Completion as defined in the
7 Contract, the Engineer may determine that the work is Substantially Complete. The
8 Engineer will notify the Contractor in writing of the Substantial Completion Date. For
9 overruns in Contract time occurring after the date so established, the formula for
10 liquidated damages shown above will not apply. For overruns in Contract time
11 occurring after the Substantial Completion Date, liquidated damages shall be
12 assessed on the basis of direct engineering and related costs assignable to the project
13 until the actual Physical Completion Date of all the Contract Work. The Contractor
14 shall complete the remaining Work as promptly as possible. Upon request by the
15 Project Engineer, the Contractor shall furnish a written schedule for completing the
16 physical Work on the Contract.

17
18 **END OF SECTION**
19

1 **1-09 MEASUREMENT AND PAYMENT**

2
3 **1-09.2(1) General Requirements for Weighing Equipment**
4 **(July 23, 2015 APWA GSP, Option 2)**

5 *Revise item 4 of the fifth paragraph to read:*

- 6
7 4. Test results and scale weight records for each day's hauling operations are
8 provided to the Engineer daily. Reporting shall utilize WSDOT form 422-027,
9 Scaleman's Daily Report, unless the printed ticket contains the same information
10 that is on the Scaleman's Daily Report Form. The scale operator must provide AM
11 and/or PM tare weights for each truck on the printed ticket.
12

13 **1-09.6 Force Account**
14 **(October 10, 2008 APWA GSP)**

15 *Supplement this Section with the following:*

16
17 The Contracting Agency has estimated and included in the Proposal, dollar amounts
18 for all items to be paid per force account, only to provide a common proposal for
19 Bidders. All such dollar amounts are to become a part of Contractor's total bid.
20 However, the Contracting Agency does not warrant expressly or by implication, that
21 the actual amount of work will correspond with those estimates. Payment will be made
22 on the basis of the amount of work actually authorized by Engineer.
23

24 **(January 13, 2011 Tacoma GSP)**

25 *Item #3 of this Section is supplemented with the following:*

26
27 The Contractor shall submit a comprehensive summary list of all equipment
28 anticipated to be used on the project and their associated AGC/WSDOT Equipment
29 Rental Rates. The list shall include the contractor's equipment number, make, model,
30 year, operation rate, standby rate, applicable attachments and any other applicable
31 information necessary to determine the applicable rates in accordance with this
32 section. In addition, the contractor shall submit an Equipment Watch rate sheet
33 (www.equipmentwatch.com) for each piece of equipment in the summary list. Access
34 to the Equipment Watch web site is available at the City's Construction Management
35 Office.
36

37 **1-09.9 Payments**
38 **(March 13, 2012 APWA GSP)**

39 *Delete the first four paragraphs and replace them with the following:*

40
41 The basis of payment will be the actual quantities of Work performed according to the
42 Contract and as specified for payment.
43

44 The Contractor shall submit a breakdown of the cost of lump sum bid items at the
45 Preconstruction Conference, to enable the Project Engineer to determine the Work
46 performed on a monthly basis. A breakdown is not required for lump sum items that
47 include a basis for incremental payments as part of the respective Specification.
48 Absent a lump sum breakdown, the Project Engineer will make a determination based
49 on information available. The Project Engineer's determination of the cost of work
50 shall be final.
51

1 Progress payments for completed work and material on hand will be based upon
2 progress estimates prepared by the Engineer. A progress estimate cutoff date will be
3 established at the preconstruction conference.
4

5 The initial progress estimate will be made not later than 30 days after the Contractor
6 commences the work, and successive progress estimates will be made every month
7 thereafter until the Completion Date. Progress estimates made during progress of the
8 work are tentative, and made only for the purpose of determining progress payments.
9 The progress estimates are subject to change at any time prior to the calculation of
10 the final payment.
11

12 The value of the progress estimate will be the sum of the following:

- 13 1. Unit Price Items in the Bid Form — the approximate quantity of acceptable
14 units of work completed multiplied by the unit price.
- 15 2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump
16 sum breakdown for that item, or absent such a breakdown, based on the
17 Engineer's determination.
- 18 3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job
19 site or other storage area approved by the Engineer.
- 20 4. Change Orders — entitlement for approved extra cost or completed extra work
21 as determined by the Engineer.
22

23 Progress payments will be made in accordance with the progress estimate less:

- 24 1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
- 25 2. The amount of progress payments previously made; and
- 26 3. Funds withheld by the Contracting Agency for disbursement in accordance with
27 the Contract Documents.
28

29 Progress payments for work performed shall not be evidence of acceptable
30 performance or an admission by the Contracting Agency that any work has been
31 satisfactorily completed. The determination of payments under the contract will be
32 final in accordance with Section 1-05.1.
33

34 *This section is supplemented with the following:*
35 **(January 6, 2015 Tacoma GSP)**
36

37 Breakdowns of all lump sum items shall be provided for all lump sum items and shall
38 include all costs for labor, equipment, materials, and taxes (as applicable) associated
39 with the lump sum item. Washington State Department of Revenue Rules 170 and
40 171 apply to lump sum items per Section 1-07.2 of the WSDOT State Amendments to
41 the Standard Specifications.
42

43 Stockpiled Material - The point of acceptance of stockpiled material for payment and
44 quality shall be at the time of incorporation into the contract.
45
46

1 **1-09.9(1) Retainage**
2 **(May 10, 2006 Tacoma GSP)**

3 *The fourth paragraph is supplemented with the following:*
4

- 5 6. A "General Release to the City of Tacoma" is on file with the Contracting Agency.
6 7. A release has been obtained from the City of Tacoma's City Clerk's Office.
7

8 **1-09.13(3)A Administration of Arbitration**
9 **(October 1, 2005 APWA GSP)**

10 *Revise the third paragraph to read:*
11

12 The Contracting Agency and the Contractor mutually agree to be bound by the
13 decision of the arbitrator, and judgment upon the award rendered by the arbitrator may
14 be entered in the Superior Court of the county in which the Contracting Agency's
15 headquarters are located. The decision of the arbitrator and the specific basis for the
16 decision shall be in writing. The arbitrator shall use the contract as a basis for
17 decisions.
18

19 **END OF SECTION**
20

1
2 **1-10 TEMPORARY TRAFFIC CONTROL**
3

4 **1-10.1(2) Description**
5 **(July 22, 2019 Tacoma GSP)**

6 *The first sentence of the fourth paragraph is revised to read:*
7

8 The Contractor shall keep lanes, on-ramps, and off-ramps open to traffic at all times
9 except when Work requires closure(s) that have been requested and approved in
10 accordance with section 1-10.2(2).
11

12 *The third sentence of the fourth paragraph is revised to read:*
13

14 Approved lane and ramp closures shall be for the minimum time required to complete
15 the Work.
16

17 *This section is supplemented with the following:*
18

19 Only uniformed off-duty police officers shall be used to control traffic when it is
20 necessary to override or provide traffic control at signalized intersections. Off-duty
21 City of Tacoma Police Department officers are preferred within the jurisdiction of the
22 Tacoma PD, and the Contractor shall grant the Tacoma PD the "first right of refusal"
23 by contacting the Tacoma PD first as stated in the following section below.
24

25 The City will make all necessary temporary adjustments to existing traffic signals and
26 traffic signal activators.
27

28 Existing signs shall not be removed until the Contractor has provided for temporary
29 measures sufficient to safeguard and direct traffic after existing signs have been
30 removed. Preservation of temporary traffic control and street name signs shall be the
31 sole responsibility of the Contractor.
32

33 As the work progresses and permits, temporarily relocated and/or removed traffic
34 signs shall be reset in their permanent location. Permanent signs and other traffic
35 control devices damaged or lost by the Contractor shall be replaced or repaired at the
36 Contractor's expense.
37

38 **1-10.2 Traffic Control Management**
39

40 **1-10.2(1) General**
41 **(January 3, 2017)**

42 *Section 1-10.2(1) is supplemented with the following:*
43

44 Only training with WSDOT TCS card and WSDOT training curriculum is recognized in
45 the State of Washington. The Traffic Control Supervisor shall be certified by one of the
46 following:
47

48 The Northwest Laborers-Employers Training Trust
49 27055 Ohio Ave.
50 Kingston, WA 98346
51 (360) 297-3035

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022
Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701

1-10.2(2) Traffic Control Plans

(***)**

Supplement this section with the following:

The Contractor shall prepare site specific Traffic Control Plans for all phases of the work and submit them in advance for approval to the Engineer. The Plans may be submitted in phases in advance of, and associated with, specific pending construction activities, but must be provided at least 3 weeks prior to the desired start date of the work/activity to allow for review time and advance deployment of public notice upon receipt of the approved Traffic Control Plan(s). If Traffic Control Plans to address all needs/duration of the project are intended to be submitted at the same time prior to any construction starting, then the City will require 5 weeks' advance notice to ensure adequate review time and coordination on needs. The Contractor's proposed Traffic Control Plans shall show the actual extent of the work area, including equipment needs, within the proposed work zone and complement that information with necessary lane closures, lane shifts, construction signs, flaggers, spotters, and other traffic control devices required to support each phase of the construction while maintaining access as specified in Section 1-07.23. The Contractor-provided plans shall be prepared by the Contractor's Traffic Control Supervisor or an engineer licensed in the State of Washington and shall conform to the requirements contained in the latest version of the Manual on Uniform Traffic Control Devices (MUTCD), the City's Traffic Control Handbook, and the latest version of the Work Zone Traffic Control Guidelines published by the Washington State Department of Transportation. WSDOT 'TC' Plans and the City of Tacoma Sample Setup Drawings are acceptable (if amended with or accompanied by the expected details described above) for submittal and review, as and if applicable.

Traffic Control Plans shall also specify how pedestrian routes shall be maintained through the project site.

Traffic Control Plans shall provide detail on how access will be maintained to driveways and residences and for emergency vehicles throughout the duration of construction. Plans shall indicate the method(s) by which access will be maintained during roadway excavation to prevent vehicle bumpers dragging and during other construction activities.

Prior to substantial development and submitting of the initial Traffic Control Plans for review by the Engineer, the Contractor shall meet with the Engineer and provide a detailed explanation of the Contractor's proposed construction schedule, construction

1 phasing and associated temporary traffic control implementation. The plan must be
2 acceptable to the Engineer prior to the Contractor submitting the initial set of Traffic
3 Control Plans. No construction, including advance deployment of PCMS, will be
4 allowed until the Traffic Control Plans are acceptable to and approved by the Engineer.

5
6 Payment for developing approved Traffic Control Plans, including pedestrian-related
7 elements, shall be considered incidental to the lump sum price in the Proposal for
8 "Project Temporary Traffic Control" and no additional compensation will be made.
9

10 *Section 1-10.3 is supplemented with the following:*

11
12 **Signalized Intersections**
13 **(August 15, 2019 Tacoma GSP)**
14

15 When construction operations are such that an existing traffic signal is required to be
16 overridden to allow for traffic control measures, only a uniformed off-duty police officer
17 shall override the signal.
18

19 All off-duty officers shall be commissioned within the State of Washington.
20

21 Tacoma Police Department officers shall be the first choice for traffic control that
22 overrides any traffic signal within the jurisdiction of the City of Tacoma PD. The
23 Contractor shall first contact Tacoma Police Department, Special Events Sergeant, to
24 schedule police officers for the specified traffic control duty.
25

26 Tacoma Police Department
27 Special Events Sergeant
28 (253) 591-5932
29 TacomaPoliceEvents@ci.tacoma.wa.us
30

31 The Contractor shall request officers at least 48 hours in advance for scheduling,
32 unless an exception is approved by the Engineer and the Tacoma PD is able to
33 accommodate the exception.
34

35 The Contractor shall immediately notify the Engineer in writing if Tacoma PD cannot
36 supply officers for the requested date(s). The Contractor shall include the written
37 response from Tacoma PD and state the preference to either postpone the affected
38 Work or request officers from other State of Washington jurisdictions. Using officers
39 from other jurisdictions must be approved by the Engineer.
40

41 The Contractor will not be compensated for any off-duty officers from other jurisdictions
42 performing traffic control without prior approval from the Engineer, and the Contracting
43 Agency may stop work in accordance with Section 1-08.6, "Suspension of Work".
44
45

1 **1-10.3 Traffic Control Labor, Procedures, and Devices**

2
3 **1-10.3(3)A Construction Signs**
4 **(January 11, 2006 Tacoma GSP)**

5 *The fifth paragraph is revised to read:*

6
7 Signs, posts, or supports that are lost, stolen, damaged, destroyed, or which the
8 Engineer deems to be unacceptable while their use is required on the project shall be
9 replaced by the Contractor at their expense.

10
11 **1-10.3(3)C Portable Changeable Message Sign**
12 **(*****)**

13 *This section is supplemented with the following:*

14
15 Portable Changeable Message Signs (PCMS) shall be required on arterials streets
16 where construction occurs for durations longer than seven (7) calendar days or hinders
17 the accommodation of two-way flow. PCMS shall be solar charged and
18 programmable. PCMS shall be provided a minimum of seven (7) calendar days prior
19 to construction and remain through the duration of the construction on the arterial
20 street. PCMS shall be provided on each end, or appropriately in advance, of the
21 arterial street construction zone and on the intersecting arterials notifying oncoming
22 traffic of the construction conditions. All costs associated with providing and maintain
23 the signs for the required duration shall be included in the proposal item, "Project
24 Temporary Traffic Control", lump sum.

25
26 Arterial streets within the project area are identified in Section 1-07.23(1).

27
28 Contractor shall expect to have between 6 to 8 PCMS deployed onsite at any given
29 time during construction.

30
31 To prevent hackers from getting access to the PCMS, the Contractor is required to
32 change the default password and to take other appropriate measures for field access
33 to message control features on the PCMS. In addition, the Contractor shall verify the
34 PCMS control box, if any, is secured and locked from tampering during the daily review
35 of the work zone set up and conditions of the traffic control devices.

36
37 **1-10.4 Measurement**

38
39 **1-04.4(3) Reinstating Unit Items With Lump Sum Traffic Control**
40 **(January 11, 2006 Tacoma GSP)**

41 *This section is supplemented with the following:*

42
43 No unit of measure will apply to the position of traffic control manager and it will be
44 considered included in other unit contract prices in the Bid Proposal.

45
46 "Uniformed Police Officer for Traffic Control" will be measured by the hour. Portions
47 of an hour will be rounded up to a whole hour.

1 (*****)

2 *Supplement this section with the following:*

3
4 No unit of measure will apply to providing and maintaining Portable Changeable
5 Message Signs. All costs associated with Portable Changeable Message Signs shall
6 be included in other unit contract prices in the Proposal.
7

8 **1-10.5 Payment**

9
10 **1-10.5(3) Reinstating Unit Items With Lump Sum Traffic Control**

11 (*****)

12 *This section is supplemented with the following:*

13
14 "Project Temporary Traffic Control", lump sum.

15
16 The Lump Sum bid item for "Project Temporary Traffic Control" shall cover the cost to
17 provide temporary traffic control for each and every Working day (the entire contract
18 duration) allowed as defined in Section 1-08.5 of these Special Provisions. The total
19 allowable working days defined for this contract includes sufficient time to complete all
20 work associated with items allocated to Force Account items. Should the Contractor
21 complete the work in fewer Working days than allowed, the Contract lump sum item
22 will be paid in full and shall be consider an incentive to the Contractor for early
23 completion. For additional Working days approved via a change order for work that is
24 not identified to be paid by Force Account the daily cost for Project Temporary Traffic
25 Control shall be determined by dividing the lump sum Contract price for "Project
26 Temporary Traffic Control" by the originally allowed contract working days as defined
27 in Section 1-08.5 of these Special Provisions to arrive at a daily cost for temporary
28 traffic control.
29

30 "Uniformed Police Officer for Traffic Control", per hour.

31
32 The unit contract price, when applied to the number of units measured for this item in
33 accordance with Section 1-10.4(2), shall be full compensation for all cost incurred by
34 the Contractor in performing the work in accordance with Section 1-10.3.
35

36 **END OF SECTION**
37

1
2 **2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP**
3 **(March 17, 2016 Tacoma GSP)**
4

5 **2-01.1 Description**

6 *The first sentence of the first paragraph is revised to read:*
7

8 The Contractor shall clear, grub, and cleanup those areas within project area as
9 required to complete the Work.

10
11 *This section is supplemented with the following:*
12

13 Trees, stumps, shrubs, and brush located outside the Clearing & Grubbing limits shall
14 be considered as part of "Clearing and Grubbing" when identified for removal on the
15 Plans.
16

17 **2-01.2 Disposal of Usable Material and Debris**

18 *The second paragraph is revised to read:*
19

20 The Contractor shall dispose of all debris in accordance with Section 2-01.2(2).
21

22 **2-01.3(1) Clearing**

23 *This section is revised to read:*
24

- 25 1. Fell trees only within the area to be cleared.
- 26 2. Close-cut parallel to the slope of the ground all stumps to be left in the cleared
27 area outside the slope stakes.
- 28 3. Close cut all stumps that will be buried by fills 5-feet or less in depth.
- 29 4. Follow these requirements for all stumps that will be buried by fills deeper than
30 5-feet from the top, side, or end surface of the embankment or any structure
31 and are in a location that will not be terraced as described in Section 2-
32 03.3(14):
 - 33 a. Close-cut stumps under 18-inches in diameter.
 - 34 b. Trim stumps that exceed 18-inches in diameter to no more than 12-
35 inches above original ground level.
- 36 5. Leave standing any trees or native growth indicated by the Engineer.
- 37 6. Trim all trees to be left standing to the height specified by the Engineer, with a
38 minimum height of eight (8) feet above sidewalk and fourteen (14) feet above
39 the roadway surface. Neatly cut all limbs close to the tree trunk.
- 40 7. Thin clumps of native growth as the Engineer may direct.
- 41 8. Protect, by fencing if necessary, all trees or native growth from any damage
42 caused by construction operations.

43 **2-01.3(2) Grubbing**

44 *Item e is revised to read:*
45

46 Upon which embankments will be placed, except stumps may be close-cut or trimmed
47 as allowed in Section 2-01.3(1) item 4.
48
49

1 **2-01.4 Measurement**

2 *Supplement this section with the following:*

3

4 Clearing and grubbing will not be measured for payment but shall be included in the
5 lump sum price for "Removal of Structures and Obstructions".

6

7

END OF SECTION

8

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

(***)**

2-02.1 Description

Supplement this section with the following:

This work shall consist of removing all materials noted in this section of the Special Provisions as well as any other materials designated for removal on the Plans or necessary for construction of this project for which a specific Bid item is not provided in the Proposal. The following specific items shall be included under "Removal of Structures and Obstructions":

1. Trimming and or removing vegetation as required to complete the Work, including that necessary to utilize existing parking lanes as travel lanes through the Work Zone.
2. Removing stumps, shrubs, or brush as required to complete the Work.
3. Removing boulders in planter strip as needed to complete work.
4. Removing, salvaging, and reinstalling the rockery within the pocket park south of 6th Avenue (Approximately STA 403+00).
5. Removing, salvaging, and reinstalling brick landscape border at the back of walk on South I Street (Approximately STA 418+20, left).

In general, the Contractor shall remove/dispose or abandon existing items which are in conflict with the new improvements. Where not in conflict, or where not specified for demolition or removal, Contractor shall protect all private and public improvements.

All material removed for construction of the project, except those designated for salvage, shall be hauled offsite to a legal disposal site by the Contractor. The Contractor shall determine the requirements of his selected disposal site related to accepting the material to be deposited on the site. Testing of the material by the disposal site or refusal of the site to accept the material shall not be the basis for additional payment or for an extension of the Contract time. The cost of all such requirements shall be included in the Bid price for Removal of Structures and Obstructions.

2-02.3 Construction Requirements

2-02.3(3) Removal of Pavement, Sidewalks, and Curbs

This section is deleted.

END OF SECTION

1
2 **2-03 ROADWAY EXCAVATION AND EMBANKMENT**

3 **(*****)**

4
5 **2-03.1 Description**

6 *The last sentence of the first paragraph is deleted.*

7
8 **2-03.3(5) Slope Treatment**

9 *This section is deleted.*

10
11 **2-03.3(19) Removal of Pavement, Sidewalks, Curbs, and Gutters**

12 *This section is deleted.*

13
14 **2-03.4 Measurement**

15 *Supplement this section with the following:*

16
17 Roadway excavation as required for pavement, curbs sidewalk, and other surface
18 restoration shall not be measured for payment. All roadway excavation costs shall be
19 included in other pertinent Bid items in the Proposal.

20
21 **END OF SECTION**
22

1
2 **2-07 WATERING**
3 **(August 3, 2009 Tacoma GSP)**
4

5 **2-07.3 Construction Requirements**

6 *The last sentence of the first paragraph is revised to read:*
7

8 The Engineer may direct that the Contractor apply water during non-working hours
9 such as evenings, weekends, or recognized holidays.
10

11 *Section 2-07.3 is supplemented with the following:*
12

13 **2-07.3(1) Water Supplied from Hydrants**
14

15 There is no guarantee that all fire hydrants will be available for use for cleaning, lining,
16 or any other construction activities associated with this project. Prior to construction
17 activities, it shall be the Contractor's responsibility to verify which hydrants will be
18 available by contacting Tacoma Water. The Contractor shall use only those hydrants
19 designated by Tacoma Water.
20

21 Water supplied from hydrants governed by Tacoma Water shall be used in strict
22 compliance with the "Operating Procedures for the use of Water Division Hydrants"
23 available at the Tacoma Water Permit Counter.
24

25 The Contractor shall obtain a Hydrant Permit prior to start of work by contacting the
26 Water Permit Counter at (253) 502-8247, 2nd floor, Tacoma Public Utilities,
27 Administrative Building, 3628 South 35th Street, Tacoma, WA 98409. A copy of the
28 approved Hydrant Permit shall be submitted to the Engineer.
29

30 Contractor personnel shall be in possession of a valid Tacoma Public Utilities Hydrant
31 Certification Card prior to obtaining a permit. If necessary, contractor personnel shall
32 undergo training to receive the required certification. Contact the Water Permit
33 Counter to set up training as necessary.
34

35 **END OF SECTION**
36

1
2 **2-09 STRUCTURE EXCAVATION**

3 **(*****)**

4
5 **2-09.4 Measurement**

6 *This section is supplemented with the following:*

7
8 **Longitudinal Limits.** For all storm and sanitary sewers, the longitudinal
9 measurement will be from center of manhole to center of manhole or to the inside face
10 of catch basins and similar type structures.

11
12 *The fourth paragraph is revised to read:*

13
14 There will be no specific unit of measure for the excavation required for manholes,
15 catch basins, grate inlets, and drop inlets.

16
17 **2-09.5 Payment**

18 *The pay item for "Structure Excavation Class B" is supplemented with the following:*

19
20 "Structure Excavation Class B", per cubic yard.

21
22 The unit Contract price for "Structure Excavation Class B" shall be full payment for all
23 excavation, removal of water; storing, protecting and re-handling of suitable backfill
24 material; backfilling of the trench, compaction of backfill, and all other work necessary
25 for the construction of the sewer trench.

26
27 "Structure Excavation Class B" shall only be applied to excavation required for
28 wastewater sewer and storm sewer main, lateral, and appurtenance installation. All
29 excavation required for potable water main, service, and appurtenance installation
30 shall be measured and paid as "Trench Excavation & Disposal" per Section 7-09.

31
32 **END OF SECTION**

1
2 *Add the following new section:*
3

4 **2-13 VEGETATION REMOVAL**
5 **(*****)**
6

7 **2-13.1 Description**
8

9 This Work shall consist of the removal and disposal of vegetation identified on the
10 Plans or as required to complete the Work. Work shall also include trimming
11 vegetation as required to complete the Work and as specified herein.
12

13 **2-13.3 Construction Requirements**
14

15 All stumps not identified for removal shall be close-cut parallel to the slope of the
16 ground.
17

18 All stumps identified for stump grinding shall be ground to eight inches below final
19 grade.
20

21 Disposal of all debris shall be in accordance with Section 2-01.2(2).
22

23 **2-13.4 Measurement**
24

25 Vegetation removal and trimming shall be considered essential to the project and shall
26 not be measured for payment. All costs for vegetation removal shall be included in
27 "Removal of Structures and Obstructions".
28

29 **END OF SECTION**
30
31

Add the following new section:

2-14 PAVEMENT REMOVAL
(***)**

2-14.1 Description

The Work described in this section includes the removal and disposal of pavement surfaces identified on the Plans or as marked in the field.

2-14.2 Pavement Classification

Removal of pavement will be according to type and class based on composition and thickness, as defined below:

Type I Pavement removal where all or portions of the existing pavement is being removed in conjunction with street construction or any other removal not described below for Type II or Type III.

Type II Pavement removal required for the placing of utilities at greater and varying depths, such as sewers.

Type III Pavement removal required for narrow and shallow utility cuts in order to install light cables, conduits and similar shallow utilities.

Class A2 Class A2 pavement removal shall apply to the removal of asphalt concrete, bituminous road surfacing, multiple lift bituminous surface treatments or any combination of these components having an average thickness of two inches or less.

Class A4 Class A4 pavement removal shall apply to the removal of asphalt concrete, bituminous road surfacing, multiple lift bituminous surface treatments or any combination of these components having an average thickness between two inches and four inches.

Class A8 Class A8 pavement removal shall apply to the removal of asphalt concrete, bituminous road surfacing, multiple lift bituminous surface treatments or any combination of these components having an average thickness between four inches and eight inches.

Class C6 Class C6 pavement removal shall apply to all non-reinforced cement concrete pavements or slabs having an average thickness of six inches or less. After the curbs and pavement have been constructed, the Contractor may be required to remove additional sidewalk necessary to provide proper connections and grades, as determined by the Engineer.

Class C12 Class C12 pavement removal shall apply to all non-reinforced cement concrete pavements or slabs having an average thickness of between 6 inches and 12 inches.

Class CA Class CA pavement removal shall apply to all pavements that have a wearing surface of asphalt concrete upon a cement concrete pavement or, cement concrete base, and for which the total combined thickness of the pavement averages between six inches and twelve inches. However, combined pavement thicknesses up to twenty-four inches in depth may be encountered along the corridor, particularly within the intersections. See the Existing Conditions & Pothole Plan sheets for additional information regarding pavement section thicknesses.

Class H Class H pavement removal shall apply to early type pavement of a cement concrete base with a brick or cobblestone surface and potentially an additional layer of asphalt concrete pavement for which the total combined thickness of the pavement averages between ten inches and twenty inches.

Class T Class T pavement removal shall apply to early type pavement of a cement concrete base with abandoned trolley tracks fastened into railroad ties. There may be a brick, concrete, or cobblestone surface surrounding the tracks and potentially an additional layer of asphalt concrete pavement for which the total combined thickness of the pavement averages between twenty inches and thirty inches.

2-14.3 Construction Requirements

All temporary and final meetlines shall be sawcut.

The removal of existing street improvements shall be conducted in such a manner as not to damage utilities and any portion of the improvement that is to remain in place. Any deviation in this matter will obligate the Contractor, at no expense to the Contracting Agency, to repair, replace, or otherwise make proper restoration to the satisfaction of the Engineer.

2-14.4 Measurement

Pavement removal will be measured per square yard, regardless of thickness.

2-14.5 Payment

Payment will be made in accordance with Section 1-04.1.

"Remove Existing Pavement, Type ____Class____", per square yard

All costs associated with saw cutting meet lines shall be included in the unit Contract price for pavement removal.

Note that the Contractor will need to mobilize to sawcut multiple times: First for pavement removal associated with the Temporary Pavement Patch and again for pavement removal associated with the permanent patch.

END OF SECTION

1
2 **2-15 CURB AND CURB AND GUTTER REMOVAL**
3 **(*****)**
4

5 **2-15.1 Description**
6

7 The Work described in this section includes the complete removal and disposal of
8 curbs and curb and gutter identified on the Plans or as marked in the field.
9

10 **2-15.2 Curb Classification**
11

12 Removal of curb and/or curb and gutter will be based on composition, as defined
13 below:
14

15 **Integral Curb** - Integral curb shall consist of curb that is constructed monolithic with
16 the adjacent cement concrete pavement.
17

18 **Curb** - Curb may consist of cement concrete curb, granite curb, or any other
19 combination of rigid material that extends below the pavement surface elevation.
20

21 **Extruded/Precast Curb** - Extruded or precast curb may consist of asphalt or concrete
22 extruded or precast curb that is installed on a pavement surface.
23

24 **Curb and Gutter** - Curb and gutter may be cement concrete, or a cement concrete
25 curb with a brick gutter on a cement concrete base, or other combination of rigid
26 material.
27

28 **2-15.3 Construction Requirements**
29

30 The removal of the curb and/or curb and gutter shall be conducted in such a manner
31 as not to damage utilities and any portion of the improvement that is to remain in place.
32 Any deviation in this matter will obligate the Contractor, at no expense to the
33 Contracting Agency, to repair, replace, or otherwise make proper restoration to the
34 satisfaction of the Engineer.
35

36 Contractor will encounter different types of curb and gutter throughout the project,
37 including both traditional curb and gutter, monolithic curb and gutter, and cement
38 concrete curb/granite with a brick gutter pan.
39

40 **2-15.4 Measurement**
41

42 Curb and curb and gutter removal will be measured per linear foot. Removal of all
43 curb types, with the exception of HMA wedge curb and cement concrete pedestrian
44 curb, will be measured as "Remove Curb and Gutter", per linear foot.
45

46 Removal of HMA wedge curb, if encountered, and cement concrete pedestrian curb,
47 if required, will be measured as "Remove Existing Pavement, Type ____Class____", per
48 square yard.
49
50

1 **2-15.5 Payment**

2
3 Payment will be made in accordance with Section 1-04.1.

4
5 "Remove Curb and Gutter", per linear foot.

6
7 All costs associated with saw cutting necessary for the removal of curb and/or curb
8 and gutter shall be included in the unit Contract price for removal.

9
10 **END OF SECTION**
11

1
2 *Add the following new section:*
3

4 **2-16 REMOVAL OF CATCH BASINS, MANHOLES, CURB INLETS, ETC.**
5 **(*****)**
6

7 **2-16.1 Description**
8

9 The Work described in this section includes the complete removal and disposal of
10 catch basins, manholes, and curb inlets as identified on the Plans.
11

12 **2-16.2 Vacant**
13

14 **2-16.3 Construction Requirements**
15

16 Where the structures are removed, the excavation shall be backfilled with native
17 material if deemed suitable by the Engineer or imported backfill material.
18

19 Material determined by the Engineer to be unsuitable at the time of excavation shall
20 be removed and replaced with imported backfill material. Payment will be made at the
21 unit contract price of the item in the proposal, or as extra work under Section 1-04.4 if
22 not included as an item in the proposal.
23

24 All pipe openings shall be plugged in accordance with 7-08.3(6).
25

26 The removal of the structures shall be conducted in such a manner as not to damage
27 utilities and any portion of the improvement that is to remain in place. Any deviation
28 in this matter will obligate the Contractor, at no expense to the Contracting Agency, to
29 repair, replace, or otherwise make proper restoration to the satisfaction of the
30 Engineer.
31

32 **2-16.4 Measurement**
33

34 The removal of catch basins, manholes, and curb inlets will be measured per each.
35

36 **2-16.5 Payment**
37

38 Payment will be made in accordance with Section 1-04.1.
39

40 "Remove Manhole", per each
41

42 All costs associated with the placement and compaction of the backfill material shall
43 be included in the unit Contract price for removal.
44

45 All costs for removing or plugging pipe associated with removed structures as specified
46 on the Plans will be considered incidental to and included in the price for structure
47 removal.
48

49 **END OF SECTION**
50

1
2 **3-04 ACCEPTANCE OF AGGREGATE**
3 **(April 1, 2012 Tacoma GSP)**
4

5 **3-04.1 Description**

6 *The first and third paragraphs are deleted.*
7

8 *The fourth paragraph is revised to read:*
9

10 Nonstatistical evaluation will be used for the acceptance of aggregate materials.
11

12 **3-04.3(1) General**

13 *The first sentence is revised to read:*
14

15 For the purpose of acceptance sampling and testing, all test results obtained for a
16 material type will be evaluated collectively.
17

18 **3-04.3(4) Testing Results**

19 *This section is replaced with the following:*
20

21 The results of all acceptance testing will be provided by the City's Project Engineer
22 within 3 working day of testing.
23

24 **3-04.3(6) Statistical Evaluation**

25 *This section is deleted:*
26

27 **END OF SECTION**
28
29

1
2 **4-04 BALLAST AND CRUSHED SURFACING**
3 **(*****)**
4

5 **4-04.1 Description**

6 *Supplement this section with the following:*
7

8 Work shall also include using recycled concrete aggregate for the pavement patch as
9 specified on the Plans.

10
11 **4-04.2 Materials**

12 *Supplement this section with the following:*
13

14 Recycled Concrete Aggregate 9-03.21(1)C
15

16 **4-04.4 Measurement**

17 *Supplement this section with the following:*
18

19 "Recycled Concrete Aggregate" shall be measured per cubic yard in place and shall
20 be measured from subgrade to the bottom of the proposed asphalt layer.
21

22 **4-04.5 Payment**

23 *This section is supplemented with the following:*
24

25 All costs for labor, equipment, tools, and materials required to furnish, place, and
26 compact the crushed surfacing top course for all asphalt concrete approaches and
27 non-paved approaches shall be included in the unit Contract price for "Crushed
28 Surfacing Top Course", per ton.
29

30 "Recycled Concrete Aggregate", per cubic yard.
31

32 The unit price in the Proposal shall be full compensation for all labor, equipment, tools,
33 and material necessary or incidental to furnish, place, grade, and compact recycled
34 concrete aggregate for the pavement section where specified on the Plans. All
35 additional sampling and testing as required to show compliance with Section 9-
36 03.21(1)C shall be conducted by the Contractor and all costs associated with the
37 additional sampling/testing shall be included in the "Recycled Concrete Aggregate"
38 unit price.
39

40 **END OF SECTION**
41
42

5-04 HOT MIX ASPHALT

(***)**

This Section is revised according to the following overriding provisions:

Nonstatistical or test point evaluation shall be the method for HMA compaction acceptance for all HMA pavement, except where visual or commercial evaluation is specified. Visual evaluation shall be considered synonymous with commercial evaluation. The Contracting Agency will not be required to perform any acceptance by statistical evaluation.

All references to “statistical” are revised to read “nonstatistical”, and “nonstatistical” evaluation shall be considered synonymous with “test point” evaluation. Thus, all Specifications for test procedures, methods, construction requirements, and requirements for evaluation and acceptance shall apply to the Work with the following exceptions:

- The Contracting Agency shall not be required to perform statistical analysis of any acceptance test results.
- Quantities for sublots and lots shall be as determined by the Engineer. If test results are found not to be within specification requirements, additional testing as needed to determine a CPF may be performed.
- The Contracting Agency shall not be required to make price adjustments based on pay factors and composite pay factors.

5-04.2 Materials

5-04.2(1) How to Get an HMA Mix Design on the QPL

(April 1, 2018 Tacoma GSP)

For Subsection 5-04.2(1) the term “Contracting Agency” is revised to read “WSDOT”.

5-04.2(2) Mix Design – Obtaining Project Approval

(April 1, 2018 Tacoma GSP)

This section is revised to read:

The Contactor shall submit each HMA mix design to the Contracting Agency on WSDOT Form 350-042. The Contractor shall provide a mix design based upon 3 million ESAL's.

No paving shall begin prior to the HMA mix design acceptance by the Engineer for the Job Mix Formula (JMF) that will be used for the same paving. The Contracting Agency will evaluate HMA mix design submittals according to Visual Evaluation per Table 1. The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Project Engineer and must be made in accordance with Section 9-03.8(7).

Mix designs for HMA shall have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2) and 9-03.8(6). The Contractor shall determine anti-strip additive requirements for the HMA and submit laboratory test data for anti-stripping and rutting in accordance with the following options:

- Hamburg Wheel track Test and Section 9-03.8(2), or
- Tensile Strength Ratio (TSR) Test per AASHTO T 283, or
- Previous WSDOT Lab mix design verification test data and stripping evaluation, per the Engineer's discretion and as stated below.

With the HMA mix design submittal the Contractor shall provide one of the following mix design verification certifications for Contracting Agency review:

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.
- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.**
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.**

**The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO resource proficiency sample program.

At the discretion of the Engineer, the Contracting Agency may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

For the use of Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL's) appropriate for the required use. Commercial HMA can be accepted by a Contractor certificate of compliance letter stating the material meets the HMA requirements defined in the Contract.

5-04.2(2)B Using HMA Additives (April 1, 2018 Tacoma GSP)

This section is revised to read:

The Contractor may, at the Contractor's discretion, elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature in the production of High RAP/Any RAS mixtures.
- Before using additives, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.3 Construction Requirements (***)**

Supplement this section with the following:

Three (3) inches of HMA shall be placed and maintained as temporary surfacing in open cut areas of streets, driveways and sidewalks as directed by the Inspector.

1 Temporary HMA paving shall be done so that the entire pavement cut will receive a
2 temporary patch by the conclusion of the day's work to allow resumption of normal
3 traffic patterns. Temporary paving shall be placed such that it will hold up to heavy
4 traffic for an extended period of time. All paving shall be saw-cut prior to excavation.

5
6 The Contractor shall maintain a temporary patch while Tacoma Water personnel
7 renew the services and transfer them to the new main, after which he/she shall start
8 with additional street repairs. The Contractor shall make permanent street repairs for
9 all pavement disturbed by Tacoma Water personnel during service renewal/transfer at
10 the unit price bid in the Proposal for those items.

11
12 It shall be the Contractor's responsibility to protect the edge of the paved roadway at
13 all times. The expense for pavement repairs beyond the neat line of the trench due to
14 over-excavation or damage to the roadway edge caused by heavy equipment, spoil
15 cleanup or other operations of the Contractor shall be the responsibility of the
16 Contractor.

17
18 No permanent street repairs will be made until the water services and sewer laterals
19 are transferred to the new mains. The removal of trench backfill for permanent street
20 repairs will be incidental to the bid, including additional areas disturbed during the
21 service transfers.

22
23 **5-04.3(2) Paving Under Traffic**
24 **(April 1, 2018 Tacoma GSP)**

25 *The second paragraph is supplemented with the following:*

26
27 No traffic shall be allowed on any newly placed pavement without the approval of the
28 Engineer.

29
30 **5-04.3(3)C Pavers**
31 **(April 1, 2018 Tacoma GSP)**

32 *The second paragraph is deleted.*

33
34 **5-04.3(3)D Material Transfer Device or Material Transfer Vehicle**
35 **(April 1, 2018 Tacoma GSP)**

36 *The first paragraph is revised to read:*

37
38 A Material Transfer Device/Vehicle (MTD/V) shall not be used unless specific paving
39 areas are specified below. A MTD/V shall only be used according to this special
40 provision for the following paving areas:

41
42 \$\$None.\$\$

43
44 **5-04.3(4)C Pavement Repair**
45 **(April 1, 2018 Tacoma GSP)**

46 *This section is revised to read:*

47
48 Pavement repair shall be in accordance with the City of Tacoma Right-of-Way
49 Restoration Policy found at:
50

1 [https://www.cityoftacoma.org/government/city_departments/public_works/right-of-](https://www.cityoftacoma.org/government/city_departments/public_works/right-of-way)
2 way

3
4 Pavement repair consists of asphalt concrete saw-cutting, removing asphalt concrete
5 pavement, removing crushed surfacing and subgrade, and installing Construction
6 Geotextile for Separation, placing crushed surfacing top course over the Construction
7 Geotextile, and HMA in accordance with the Contract or as directed by the Engineer.

8
9 Pavement repair excavation may also be performed by the use of a milling machine of
10 a type that has operated successfully on work comparable with that to be done under
11 the Contract and shall be approved by the Engineer prior to use. If a milling machine
12 is used for excavation, the excavation shall be as directed by the Engineer.

13
14 In all types of excavation, after the removal of the asphalt, the base material will be
15 evaluated by the Engineer to determine if it is suitable. If the base is determined not
16 to be suitable, the Contractor shall remove the base material and restore the sub-
17 grade in accordance with Section 2-06 and the Plans, regardless of the method used
18 for excavation.

19
20 Estimated plan quantities for pavement repair are approximate and are provided for
21 bidding purposes only. The actual dimensions to be used will be verified by the
22 Engineer at the time of construction. Contrary to Section 1-04.6, no changes to the
23 unit prices bid for the various items will be permitted due to any increase or decrease
24 in the amount of pavement repair.

25
26 **5-04.3(6) Mixing**
27 **(Aug 1, 2020 Tacoma GSP)**

28 *The first paragraph is revised to read:*

29
30 The asphalt supplier shall add any recycling agent and anti-stripping additive to the
31 liquid asphalt binder prior to shipment to the asphalt mixing plant, when the mix design
32 includes these additives. The Contractor shall submit the anti-stripping additive
33 amount and the manufacturer's certification, together with the HMA mix design
34 submittal in accordance with Section 5-04.2. Paving shall not begin before the anti-
35 stripping additive submittal is accepted by the Engineer.

36
37 **5-04.3(8) Aggregate Acceptance prior to Incorporation in HMA**
38 **(Aug 1, 2020 Tacoma GSP)**

39 *This section is revised to read:*

40
41 Sample aggregate in accordance with Section 3-04 prior to being incorporated into
42 HMA. The Contracting Agency shall evaluate the aggregate according to Special
43 Provision 3-04. Aggregate contributed from RAP or RAS shall not be evaluated under
44 Section 3-04.

45
46 The combined aggregate bulk specific gravity (Gsb) blend as shown on the HMA Mix
47 Design report or evaluation report per Special Provision 5-04.2(2) will be used for VMA
48 calculations. The Contracting Agency shall not be required to perform a Gsb test.

1 **5-04.3(9) HMA Mixture Acceptance**
2 **(April 1, 2018 Tacoma GSP)**

3 *The first paragraph is revised to read:*

4
5 The Contracting Agency will evaluate the HMA mixture by nonstatistical or visual
6 evaluation as determined from the criteria in Table 7 or as determined by the Engineer.
7

8 **5-04.3(9)A Test Sections**
9 **(April 1, 2018 Tacoma GSP)**

10 *The first paragraph is revised to read:*

11
12 At the start of paving, if requested by the Contractor, a compaction test section shall
13 be constructed as directed by the Engineer to determine the compactibility of the mix
14 design. Compactibility shall be based on the ability of the mix to attain the specified
15 minimum density (91 percent of the maximum density determined by WSDOT SOP
16 729, and FOP for AASHTO T 209).
17

18 Following determination of compactibility, the Contractor is responsible for the control
19 of the compaction effort. If the Contractor does not request a test section, the mix will
20 be considered compactible. See also Section 5-04.3(10)C2.
21

22 The Contractor shall also construct a test section when requested by the Engineer.
23 Test sections that are in complete compliance with the requirements of Section 5-04
24 can be incorporated into the Work, and shall be included in the quantities for related
25 Bid Items; otherwise, the Contractor shall remove the defective pavement in failed test
26 sections as determined by the Engineer and at no cost to the Contracting Agency. The
27 Contracting Agency will only pay for HMA pavement that is accepted and incorporated
28 into the project at the discretion of the Engineer. See also Section 5-04.3(10)C2.
29

30 *The second paragraph is revised to read:*

31
32 The purpose of a test section is to determine whether or not the Contractor's mix
33 design and production processes will produce HMA meeting the Contract
34 requirements related to mixture. Construct HMA mixture test sections at the beginning
35 of paving, using at least 100 tons and a maximum of 800 tons or as specified by the
36 Engineer. Each test section shall be constructed in one continuous operation.
37

38 **5-04.3(9)B Mixture Acceptance – Statistical Evaluation**
39 **(April 1, 2018 Tacoma GSP)**

40 *The title of this section is revised to read:*

41
42 **5-04.3(9)B Mixture Acceptance – Nonstatistical Evaluation**
43

44 **5-04.3(9)B1 Mixture Statistical Evaluation – Lots and Sublots**
45 **(April 1, 2018 Tacoma GSP)**

46 *The title of this section is revised to read:*
47
48

1 **5-04.3(9)B1 Mixture Nonstatistical Evaluation – Lots and Sublots**

2 *This section is revised to read:*

3
4 For HMA in a structural application, sampling and testing for total project quantities
5 less than 400 tons is at the discretion of the engineer. For HMA used in a structural
6 application and with a total project quantity less than 800 tons but more than 400 tons,
7 a minimum of one acceptance test shall be performed:

- 8
9 i. If test results are found to be within specification requirements, additional
10 testing will be at the engineer's discretion.
11 ii. If test results are found not to be within specification requirements, additional
12 testing as needed to determine a CPF shall be performed.
13 iii. For a mixture lot in progress with a mixture CPF less than 0.75, a new mixture
14 lot will begin at the Contractor's request after the Engineer is satisfied that
15 material conforming to the Specifications can be produced. See also Section
16 5-04.3(11)F.
17 iv. If, before completing a mixture lot, the Contractor requests a change to the
18 JMF which is approved by the Engineer, the mixture produced in that lot after
19 the approved change will be evaluated on the basis of the changed JMF, and
20 the mixture produced in that lot before the approved change will be evaluated
21 on the basis of the unchanged JMF; however, the mixture before and after the
22 change will be evaluated in the same lot. Acceptance of subsequent mixture
23 lots will be evaluated on the basis of the changed JMF.
24

25 **5-04.3(9)E Mixture Acceptance – Notification of Acceptance Test Results**
26 **(Aug 1, 2020 Tacoma GSP)**

27 *This section is revised to read:*

28
29 The Contracting Agency will endeavor to provide written notification (via email to the
30 Contractor's designee) of acceptance test results within 24 hours of the sample being
31 made available to the Contracting Agency. However, the Contractor agrees:

- 32
33 1. Quality control, defined as the system used by the Contractor to monitor,
34 assess, and adjust its production processes to ensure that the final HMA
35 mixture will meet the specified level of quality, is the sole responsibility of the
36 Contractor.
37 2. The Contractor has no right to rely on any testing performed by the
38 Contracting Agency, nor does the Contractor have any right to rely on timely
39 notification by the Contracting Agency of the Contracting Agency's test results
40 (or statistical analysis thereof), for any part of quality control and/or for making
41 changes or correction to any aspect of the HMA mixture.
42 3. The Contractor shall make no claim for untimely notification by the Contracting
43 Agency of the Contracting Agency's test results (or statistical analysis
44 thereof).
45

46 **5-04.3(10)B HMA Compaction - Cyclic Density**
47 **(April 1, 2018 Tacoma GSP)**

48 *This section is deleted.*
49
50

1 **5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots**
2 **(April 1, 2018 Tacoma GSP)**

3 *This section is deleted.*

5 **5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing**
6 **(April 1, 2018 Tacoma GSP)**

7 *The title of this section is revised to read:*

9 **5-04.3(10)C2 HMA Compaction Nonstatistical Evaluation – Acceptance**
10 **Testing**

11 *The second paragraph is revised to read:*

12
13 Compaction tests will be performed at a minimum of 5 various locations, as determined
14 by the Engineer, for each 400 tons placed. The locations will be determined by the
15 stratified random sampling procedure conforming to WSDOT Test Method T 716. For
16 an area in progress with a CPF less than 0.75, a new compaction sequence will begin
17 at the Contractor's request after the Project Engineer is satisfied that material
18 conforming to the Specifications can be produced. The Compaction Test Procedures
19 will be provided to the Contractor by the Contracting Agency at the Pre-Construction
20 Conference or a Pre-Paving Meeting, prior to the placement of HMA material on site.

21
22 *This section is supplemented with the following:*

23
24 Cores may be used as an addition to the nuclear density gauge tests. When cores
25 are taken by the Engineer at the request of the Contractor, the request shall be made
26 by noon of the first working day following placement of the mix. The Engineer shall be
27 reimbursed for the coring expenses.

28
29 The Engineer will inform the Contractor of field compaction test results as work is being
30 performed. Formal Test Report(s) will be provided to the Contractor within 3 Working
31 Days.

32
33 HMA for preleveling shall be compacted to the satisfaction of the Engineer.

34
35 **5-04.4 Measurement**
36 **(April 1, 2018 Tacoma GSP)**

37 *The first paragraph is revised to read:*

38
39 “HMA Cl. ___ PG ___ for Pavement Patch” will be measured by the ton in accordance
40 with Section 1-09.2, with no deduction being made for the weight of asphalt binder,
41 blending sand, mineral filler, anti-stripping additive, or any other component of the
42 mixture; and the measurement shall include asphalt wedge curbs and thickened edges
43 in accordance with the Plans or as directed by the Engineer. If the Contractor elects
44 to remove and replace mix as allowed in Section 5-04.3(11), the material removed will
45 not be measured.

46
47 *The second paragraph is revised to read:*

48
49 No specific unit of measure will apply to roadway cores, which shall be included in the
50 measurements for the HMA items that are included in the Proposal.

1 *This section is supplemented with the following:*

2
3 No specific unit of measure will apply to anti-stripping additive, which shall be included
4 in the measurements for the HMA items that are included in the Proposal.

5
6 Cold mix used in conjunction with steel plates shall not be measured for payment.

7
8 **(*****)**

9 *Supplement this section with the following:*

10
11 “Temporary HMA CI____ PG____, ____-Inch Minimum Depth, Installed & Removed”
12 shall be measured per square yard.

13
14 **5-04.5 Payment**

15 **(April 1, 2018 Tacoma GSP)**

16 *Pay items for “Job Mix Compliance Price Adjustment” and “Compaction Price Adjustment”*
17 *are deleted.*

18
19 *This section is supplemented with the following:*

20
21 “HMA CI. __ PG __ for Pavement Patch”, per ton.

22
23 The unit Contract price for pavement patch shall be full pay for all labor, equipment,
24 and materials required to complete the patching of the street, including joints, where
25 required, and removal of temporary base.

26
27 **(*****)**

28 *Supplement this section with the following:*

29
30 “Temporary HMA CI____ PG____, ____-Inch Minimum Depth, Installed &
31 Removed”, per square yard.

32
33 The unit contract price per square yard for “Temporary HMA CI____ PG____, ____-
34 Inch Minimum Depth, Installed & Removed” shall be full compensation for all costs
35 including mobilization, preparation, placement, compaction, maintenance and removal
36 in preparation for permanent street repairs.

37
38 **END OF SECTION**

1
2 **6-02 CONCRETE STRUCTURES**
3 **(February 16, 2011 Tacoma GSP)**
4

5 **6-02.3(2)B Commercial Concrete**

6 *This section is supplemented with the following:*
7

8 Where concrete Class 3000 is specified for driveways, the Contractor may use
9 commercial concrete.
10

11 **END OF SECTION**
12

1
2
3
4
5
6
7
8
9
10

7-04 STORM SEWERS
(March 17, 2003 Tacoma GSP)

This section is deleted. The requirements of Section 7-17 shall apply to storm sewers.

END OF SECTION

1
2 **7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS**
3 **(*****)**
4

5 **7-05.1 Description**

6 *This section is supplemented with the following:*
7

8 All references to sanitary sewers shall be construed to also mean storm sewers.
9

10 **7-05.3 Construction Requirements**

11 *The first sentence of the eleventh paragraph is revised to read:*
12

13 A flexible pipe-to-manhole connector shall be used in all connections of rigid and
14 thermoplastic pipes to **new** precast concrete manholes to provide a watertight joint
15 between the pipe and the manhole, unless otherwise directed by the Engineer. The
16 connector shall be "Kor-N-Seal" with "Wedge Korband" (Type I or II as required for pipe
17 diameter), manufactured by NPC, Inc., Milford, New Hampshire, or Engineer approved
18 equal. The connectors shall be installed in accordance with the manufacturer's
19 recommendations.
20

21 Connections will be made with sand collar if the pipe slope is too steep to allow flexible
22 connection. Coordinate with the City Inspector in the field to verify which connection
23 type to use.
24

25 **7-05.3(3) Connections to Existing Manholes**

26 *The first sentence is revised to read:*
27

28 The Contractor shall inspect the existing manholes in the field to verify invert elevations
29 and the scope of work necessary to make the connection(s) prior to construction.
30

31 *Add the following new section:*
32

33 **7-05.3(5) Temporary Connections to Manholes**
34

35 Contractor shall be required to construct temporary connections between the existing
36 sanitary sewer system and the new sanitary sewer manholes as necessary to maintain
37 service and accommodate construction phasing.
38

39 The proposed sewer alignment(s) at some locations conflict with existing sewer
40 alignment. Depending on construction phasing, Contractor may be required to
41 construct temporary structures in order to maintain service and/or to establish
42 bypasses.
43

44 **7-05.4 Measurement**

45 *The sixth paragraph is revised to read:*
46

47 Connections to existing structures will be measured per each.
48
49

1 *This section is supplemented with the following:*

2
3 Modifying existing structures to accept different pipe configurations or pipe sizes,
4 including coring, sealing existing penetrations, and rechanneling, shall be incidental to
5 the unit cost for connecting new pipe to existing structure, and shall not be measured
6 for payment.

7
8 Reconnecting existing sewer pipes to new manhole structures will be measured per
9 each.

10
11 Reconnecting existing sewer pipes to new sewer pipes shall be considered incidental
12 to the per linear foot price of the pipe and will not be measured for payment.

13
14 "Conversion Riser" shall be measured per each installed.

15
16 **7-05.5 Payment**

17 *The first paragraph is supplemented with the following:*

18
19 The unit Contract price for "Manhole____" shall be full pay for all work required to
20 furnish and install the new manhole to finished grade, including, but not limited to,
21 excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s),
22 channeling, covers, frames, ladders, steps, and handholds, as applicable per Standard
23 Plans.

24
25 The unit Contract price for "Catch Basin____" shall be full pay for all work required to
26 furnish and install the new catch basin to finished grade, including, but not limited to,
27 excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s),
28 frame, cover, as applicable per Standard Plans.

29
30 *The pay item for "Connection to Drainage Structure" is revised to read:*

31
32 "Connect New Sewer Pipe ____-In. Diam. to Existing Structure", per each

33
34 *This section is supplemented with the following:*

35
36 "Reconnect Existing Sewer Pipe, ____-In. Diam., to New Structure", per each.

37
38 The unit Contract price per each shall be full pay for all labor, equipment and materials
39 necessary to reconnect the existing sewer pipe to the new structure as specified in
40 Section 7-05.3.

41
42 Temporary connections constructed between the existing sewer system and the new
43 sewer system, or constructing and removing temporary structures, as required to
44 maintain service and to accommodate construction phasing will not be measured for
45 payment. Constructing, maintaining, and removing temporary connections and/or
46 temporary structures shall be considered essential for the Work, and all costs
47 associated with this effort shall be included in other, pertinent Bid items in the
48 Proposal.

1 "Conversion Riser", per each.

2

3

4

5

6

7

8

9

10

The unit price in the proposal shall be full compensation for all labor, tools, equipment, and materials necessary or incidental to providing and installing a conversation riser on a Type 1 CB as needed to accept a manhole ring and cover. This unit price shall also include the difference in price between installing a catch basin frame and grate and a manhole ring and cover.

END OF SECTION

1
2 **7-07 CLEANING EXISTING DRAINAGE STRUCTURES**
3 **(March 23, 2010 Tacoma GSP)**

4
5 **7-07.3 Construction Requirements**

6 *Item three of paragraph two is revised to read:*
7

- 8 3. If sediment and water from structures does not meet the conditions described in 1
9 or 2 above, the Contractor shall collect and dispose of all water used and all debris
10 generated in cleaning operations. No cleaning water or debris shall be flushed
11 downstream beyond the limits of the work.
12

13 **END OF SECTION**
14
15

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

(***)**

7-08.3 Construction Requirements

7-08.3(1) Excavation and Preparation of Trench

Supplement this section with the following:

The geotechnical report/boring logs may not be representative of soil conditions that may be encountered during construction. Prospective bidders should make their own interpretations and conclusions about the soils conditions that may be encountered during construction. No additional compensation will be considered for overbreak/sloughing resulting from soil conditions differing from those identified in the soil logs or because of unconsolidated backfill material in parallel trenches.

7-08.3(1)C Bedding the Pipe

This section is supplemented with the following:

Pipe bedding for sanitary and storm sewers shall be in accordance with City of Tacoma Standard Plan SU-16.

7-08.3(2)F Plugs and Connections

This section is supplemented with the following:

Rigid Couplings, manufactured by Romac Industries, Inc., or Engineer approved equal, shall be used at any pipe joint in which bell and spigot or fused joints are not used. Flexible couplings are not permitted, except for side sewer installation.

7-08.3(2)G Jointing of Dissimilar Pipe

This section is revised to read:

Dissimilar pipe shall be joined by use of rigid couplings manufactured by Romac Industries, Inc., or Engineer approved equal, except for side sewer installation.

7-08.3(3) Backfilling

The second paragraph is revised to read:

Pipe zone bedding and trench backfill for sewer pipe shall be in accordance with City of Tacoma Standard Plan SU-16. (Pipe zone backfill shall meet the requirements of Section 9-03.9(3) for Crushed Surfacing Top Course. Backfill above pipe zone and extra excavation area backfill material shall meet the requirements of Section 9-03.12(2), Gravel Backfill for Walls.) Recycled concrete shall not be used for pipe zone bedding, pipe zone backfill, backfill above pipe zone, and extra excavation area backfill.

See Section 7-09 for water main trench bedding and backfill requirements.

1 *The fourth paragraph is revised to read:*

2
3 Backfill above the pipe zone shall be accomplished in such a manner that the pipe will
4 not be shifted out of position nor damaged by impact or overloading. If pipe is being
5 placed in a new embankment, backfill above the pipe zone shall be placed in
6 accordance with Section 2-03.3(14)C. If pipe is being placed under existing paved
7 areas, or roadways, backfill above the pipe zone shall be placed in horizontal layers
8 no more than 12-inches thick and compacted to 95-percent maximum density. If pipe
9 is being placed in non-traffic areas, backfill above the pipe zone shall be placed in
10 horizontal layers no more than 12-inches thick and compacted to 85-percent maximum
11 density. All compaction shall be in accordance with the Compaction Control Test of
12 Section 2-03.3(14)D. Material excavated from the trench, if deemed suitable by the
13 engineer, shall be used for backfill above the pipe, except that organic material, frozen
14 lumps, wood, rocks, or pavement chunks larger than 6-inches in maximum dimension
15 shall not be used. Material determined by the Engineer to be unsuitable for backfill at
16 the time of excavation shall be removed and replaced with imported backfill material
17 meeting the requirements of Section 9-03.12(2). Material determined to be suitable
18 for backfill at the time of excavation shall be stockpiled and used for backfill material.
19 If the stockpiled material becomes unsuitable, the Contractor shall furnish suitable
20 material in an amount equal to that, which became unsuitable, at no expense to the
21 Contracting Agency.

22
23 *Section 7-08.3 is supplemented with the following:*

24
25 **7-08.3(5) Temporary Bypass Pumping**

26
27 **7-08.3(5)A General Requirements**

28
29 The Contractor shall design, operate, and install a bypass pumping system to maintain
30 operation of the existing sewer systems throughout the duration of the project without
31 any interruption of sewer service. The Contractor shall divert all flows around each
32 segment of the pipe designated for replacement. This diversion shall consist of
33 pumping flow from an upstream manhole and discharging it to a manhole downstream
34 of the replacement operation. After the pipe replacement work is completed and
35 accepted by the Contracting Agency, flow shall be returned to the reconstructed sewer.
36 The area affected by the bypass operation shall be fully restored.

37
38 Flow from the bypass system shall be discharged into the same system downstream
39 of the work unless prior approval is obtained from the Engineer to utilize a nearby pipe
40 network. The Engineer will determine if the nearby system has capacity to receive the
41 additional bypass flow.

42
43 To determine locations of upstream and downstream manholes for bypass purposes,
44 Bidders may view pipe networks on the City of Tacoma GIS map at
45 <https://tmap.cityoftacoma.org/>. Pipe networks are viewable by navigating to the
46 intersection/street, selecting the Layer list icon in the upper right corner, and checking
47 the box adjacent to either the Wastewater Network or Stormwater Network, as
48 applicable.

49
50 Bypass pumping shall be done in such a manner as not to damage private or public
51 property, or create a nuisance or public menace. The pumped sewage or stormwater

1 shall be in enclosed hoses or pipes that are adequately protected from traffic, and shall
2 be redirected into the appropriate sewer system. The discharge of sewage to private
3 property, city streets, sidewalks, storm sewer, or any location other than an approved
4 sanitary sewer is prohibited. The Contractor shall be liable for all cleanup, damages,
5 and resultant fines should the Contractor's operation cause any backups, overflows,
6 or property damage.

7
8 The Contractor shall be required to test the bypass pumping system in the presence
9 of the Engineer prior to taking any sewer system out of service.

10
11 Silenced pumps shall be used in all areas of nighttime work to minimize noise
12 disruption and meet the noise control requirements of Tacoma Municipal Code
13 Chapter 8.122.

14
15 The Contractor shall use hard pipe to bypass sewers 12-inches in diameter or greater.
16 The Contractor shall not block any driveways or intersections, but shall bury the pipe
17 to allow continuous access through intersections and driveways.

18
19 The Contractor may use lay-flat hose to bypass storm and sanitary sewers that are
20 less than 12 inches in diameter. The Contractor shall ensure that sewage spills do not
21 occur with the use of lay flat hoses. If sewage spills occur, the Contractor will be
22 required to use hard pipe for all sanitary sewers.

23 24 **7-08.3(5)B Backup Equipment and Monitoring**

25
26 Bypass pumping shall be scheduled for continuous operation with back-up pumps,
27 generators, and other equipment available on-site at all times for periods of
28 maintenance and refueling or failure of the primary bypass pump(s). The Contractor
29 shall provide experienced monitoring personnel on site at all times to verify the bypass
30 pumping system remains functional. These individuals shall have the experience to
31 operate and maintain the bypass system to ensure there is continuous operation of
32 the bypass system.

33 34 **7-08.3(5)C Flow for Bypass System Design**

35
36 The Contractor's bypass operation shall be sized to handle, at a minimum, the full pipe
37 capacity in each subject line removed from service. If flow conditions are greater than
38 full pipe, the Contractor may elect to wait for flow conditions to subside prior to
39 removing the subject line from service. Working days may be adjusted per
40 Specification 1-08.5. Once the Contractor removes a section of line from service
41 he/she is responsible to bypass any and all flow in the system during construction,
42 even in the event the system surcharges and exceeds the full pipe capacity, until the
43 line is returned to service.

44 45 **7-08.3(5)D Bypass Pumping Plan**

46
47 The Contractor shall submit a Bypass Pumping Plans for each location included in this
48 Contract in accordance with Section 1-05. The Contractor's plan for bypass pumping
49 shall be reviewed by the Contracting Agency before the Contractor will be allowed to
50 commence bypass pumping. The review of the bypassing system and equipment by

the Engineer shall in no way relieve the Contractor of his responsibility and public liability.

At a minimum, the bypass pumping plan for each location shall include the following:

1. Location of pumps and generators
2. Method, type, and size of plugs
3. Size, material, location, and method of installation of suction piping
4. Size, material, location, and method of installation of discharge piping
5. Bypass pump sizes, capacity, number of each to be on site
6. For pipes sized 12-inches and greater (excluding catch basins), calculations of static lift, friction losses, and flow velocity, including pump performance curves showing pump operating range
7. Power generator and standby size and location
8. Method of noise control for pumps and generators to comply with the City's noise ordinance, Tacoma Municipal Code Chapter 8.122 if necessary
9. Calculations for selection of bypass pumping pipe sizes
10. Method of protecting discharge manholes from erosion or damage
11. All backup equipment including pumps, hoses, generators, and pipe
12. Contractor's 24-hour emergency contact name and phone number
13. Description of proposed contingency plan and clean up method for any spills that may occur.

7-08.3(6) Abandon Existing Pipe

If construction of the new sewer pipe does not result in the removal of the existing pipe due to differing alignments, then the existing pipe shall be abandoned in place as shown in the Plans. The Contractor shall plug all pipe branches, stubs, or other open ends of the pipe to be abandoned. Each pipe opening shall be plugged with Class 3000 concrete for a distance of 3 times the pipe diameter, per Section 7-08.3(4). Care shall be used in placing the concrete in the pipe to ensure that the openings are completely filled and thoroughly plugged.

If the pipes to be abandoned are removed and disposed of during construction of the new sewers, all costs for the removal and disposal shall be included in the unit contract price for "Structure Excavation, Class B," at per cubic yard.

7-08.3(7) Underground Utility Potholing

Prior to start of pipeline construction, the Contractor shall pothole existing underground utilities at the locations identified on the Plans. Contractor shall expose the top and bottom of the utility to verify the exact horizontal and vertical location in the field. The top of the utility shall be field surveyed, and the diameter or dimensions shall be verified and submitted to the Engineer. The Contractor shall schedule City Survey crews a minimum 72-hours prior to potholing.

The Contractor shall provide the Engineer with a copy of the plan sheet with the pothole information clearly shown. Upon receipt of this information, the Engineer will determine if a conflict exists. The City will notify the Contractor within five (5) full working days as to what design modifications, if any, are required to resolve the

1 conflict. The Contractor shall perform the pothole as required to avoid impact to the
2 Contract schedule, based on the five (5) working day review time.

3 4 **7-08.4 Measurement**

5 *This section is supplemented with the following:*

6
7 No specific measurement shall apply to the lump sum item "Temporary ____ Sewer
8 Bypass".

9
10 No specific measurement shall apply to the lump sum item "Temporary ____ Sewer
11 Bypass Plan".

12
13 Abandonment of existing sewer pipes by plugging each opening with Class 3000
14 concrete will not be measured for payment. All costs associated with this effort shall
15 be included in other, pertinent Bid items in the Proposal.

16
17 "Underground Utility Potholing" shall be measured per each.

18 19 **7-08.5 Payment**

20 *This section is supplemented with the following:*

21
22 "Temporary ____ Sewer Bypass", lump sum

23
24 The lump sum Contract prices for "Temporary ____ Sewer Bypass" shall be full
25 payment for labor, equipment, and materials, including but not limited to, personnel,
26 fuel, monitoring, power, pumps, piping, barricades, emergency stand-by equipment,
27 trenching, surface restoration costs, and all other work necessary to maintain
28 uninterrupted storm and sanitary sewer services by bypassing the applicable sewer
29 system flows.

30
31 All costs associated with constructing temporary connections and/or constructing and
32 removing temporary structures as needed to establish sewer bypass shall be included
33 in the "Temporary ____ Sewer Bypass" lump sum Bid item.

34
35 "Temporary ____ Sewer Bypass Plan", lump sum

36
37 The lump sum Contract price for "Temporary ____ Sewer Bypass Plan" shall be full pay
38 for all costs, including but not limited to, preparing, submitting, revising, and
39 resubmitting revisions for the Temporary Bypass Plan.

40
41 "Underground Utility Potholing", per each

42
43 The unit Contract price for "Underground Utility Potholing" per each shall be full
44 compensation for all labor, tools, equipment, and materials necessary to expose the
45 locations of existing utilities, record vertical and horizontal locations, backfill, compact,
46 and restore excavated areas per City of Tacoma Standard Plan SU-27.

47
48 **END OF SECTION**

1
2 **7-09 WATER MAINS**
3 **(Tacoma Water GSP)**
4

5 **7-09.1 Description**

6 *The first paragraph is revised to read:*
7

8 This work consists of constructing water mains 24-inch in diameter and smaller in
9 accordance with the Plans, these Standard Specifications, the Special Provisions and
10 the Standard Plans, at the location shown on the Plans for Tacoma Water.
11

12 *This section is supplemented with the following:*
13

14 All pipe, fittings, valves, hydrants and other materials to be installed and placed under
15 these specifications are intended to form a durable section of the distribution system
16 of ample strength and capacity for the operating pressures in the area covered for
17 domestic, commercial and fire protection uses and must be completed in condition to
18 supply potable water of the highest sanitary quality. All material must be selected and
19 the work planned and carried out to accomplish this purpose.
20

21 The cost of any item of work to be completed or materials to be furnished on the
22 contract drawings or stated in the project specifications and having no special bid item
23 in the Proposal, shall be considered included in the various bid items of the contract
24 and no separate payment will be made. All materials required and not specifically
25 listed herein to be furnished by Tacoma Water shall be furnished by the Contractor.
26

27 Any part of work not specifically covered by these specifications shall be in accordance
28 with the American Water Works Association (AWWA) Standard Specifications and the
29 Ductile Iron Pipe Research Association (DIPRA).
30

31 **7-09.1(1) Definitions**
32

33 **7-09.1(1)C Gravel Backfill for Pipe Zone Bedding**

34 *This section is supplemented with the following:*
35

36 Aggregates will conform to the requirements for trench backfill.
37

38 **7-09.1(1)D Pipe Zone Backfill**

39 *This section is revised to read:*
40

41 Aggregates for the trench section above the "Pipe Zone Bedding" will conform to the
42 requirements for Trench Backfill 7-09.1(1)E.
43

44 **7-09.2 Materials**

45 *The item Trench Backfill is revised to read:*
46

47 Trench Backfill shall meet the requirements of Section 9-03.9(3) for Crushed Surfacing
48 Top Course. No recycled material shall be used for water main trench backfill.
49
50

1 *This section is supplemented with the following:*

2
3 All materials shall conform to American Water Works Association (AWWA) and the
4 Ductile Iron Pipe Research Association (DIPRA).

5
6 All Push On Joint and Mechanical Joint rubber gaskets shall be styrene-butadiene
7 rubber (SBR). All gaskets must conform to ANSI/AWWA C111-72 or revision thereof.
8

9 **7-09.3 Construction Requirements**

10 **7-09.3(1) General**

11 *This section is supplemented with the following:*

12
13
14 Trench Excavation shall be loaded directly onto trucks. Trench Excavation shall not
15 be stockpiled along the trench or on paved streets, driveways, and sidewalks.
16

17 Alignment and grade stakes will be provided by Tacoma Water. The Contractor shall
18 provide a minimum of 5 days working days' notice for staking by Tacoma Water.
19 Request for survey shall be made through Geff Yotter, Tacoma Water Construction
20 Operations Manager, (253) 502-8742. The Contractor shall use a string line to
21 maintain true grade, and alignment between stakes. Use of electronic leveling devices
22 for grade and alignment shall be at the discretion of the Inspector where string line is
23 impractical.
24

25 *Add the following new section:*

26 **7-09.3(1)B Trench Foundation**

27
28
29 Trench areas found to be inadequate for a solid pipeline trench foundation shall be
30 over excavated and quarry spalls shall be placed until an adequate foundation is
31 accomplished then sand bedding. Note, the profile shows the invert elevation of the
32 pipe, not the bottom of the trench.
33

34 **7-09.3(5) Grade and Alignment**

35 *The first sentence of the third paragraph is revised to read:*

36
37 The depth of trenching for water mains shall be such as to give a minimum cover of
38 42 inches over the top of pipe unless otherwise specified on the plans, within these
39 Special Provisions, or approved by the Engineer.
40

41 **7-09.3(6) Existing Utilities**

42 *This section is supplemented with the following:*

43
44 Sanitary side sewers and storm catch basin laterals that are unmarked or not locatable
45 and are damaged during water main construction will be repaired and/or replaced as
46 necessary. Prior to the start of the repair, the Inspector and/or contractor shall notify
47 agency responsible for system and make repairs to their standards and make the
48 repair available for the agencies inspection if required or requested.
49 Repair/replacement/restoration will be at the inspector's discretion and in accordance
50 with sections 7-04, 7-17, 7-18 and the Washington State Department of Ecology,
51 Criteria for Sewer Works Design, sections C1-8 and C1-9.

1
2 **7-09.3(7) Trench Excavation**

3 *The third sentence of the second paragraph of this section is revised to read:*
4

5 The minimum trench width shall be the nominal pipe diameter plus 16 inches. The
6 maximum trench width shall not exceed 30-inches, or 1.5 times the outside diameter
7 of the pipe plus 18-inches, whichever is greater, unless otherwise approved by the
8 Engineer to allow for proper construction of the pipeline, fittings and other
9 appurtenances.

10
11 **7-09.3(7)A Dewatering of Trench**

12 *This section is supplemented with the following:*
13

14 The Contractor is responsible for having proper and operational equipment for
15 dewatering. The contractor will have operational de-watering equipment on site prior
16 to main shutdown. The cost of all labor, equipment and materials for de-watering shall
17 be included in the various bid items of the contract. No additional compensation will
18 be made for dewatering.
19

20 The Contractor is responsible for keeping excavations free from water during
21 construction and disposing of the water in a manner that will not cause injury to public
22 or private property, or to cause a nuisance or a menace to the public. The Contractor
23 shall maintain dry working conditions at all times and under all conditions.
24 Groundwater flowing toward or into excavations shall be controlled to prevent
25 sloughing of excavation walls, boils, uplift, and heave in the excavation, and to
26 eliminate interference with orderly progress of construction. While the excavation is
27 open, the water level shall continuously be maintained at least two (2) feet below the
28 working level. The control of groundwater shall be such that softening of the bottom
29 of excavations, or formation of "quick" conditions or "boils" during excavation, shall not
30 occur. The Contractor is responsible for all foundation material required due to lack of
31 dewatering efforts.
32

33 All costs associated with dewatering shall be incidental to Trench Excavation and
34 Disposal, Section 7-09.3(8) of these specifications.
35

36 **7-09.3(7)C Extra Trench Excavation**

37 *The 4th paragraph of this section is revised to read:*
38

39 Additional excavations so required shall be classified as Trench Excavation and
40 Disposal.
41

42 **7-09.3(8) Removal and Replacement of Unsuitable Materials**

43 *This section heading is revised to read:*
44

45 "7-09.3(8) Trench Excavation and Disposal"
46

47 *This section is supplemented with the following:*
48

49 Unless specified elsewhere in the plans or special provisions the scope of this Contract
50 shall include the export and disposal of 100% of all excavated materials and the import
51 of 100% of all trench backfill material.

1
2 **7-09.3(9) Bedding the Pipe**

3 *The first sentence of the first paragraph is revised to read:*

4
5 Pipe zone bedding shall conform to the requirements for Trench Backfill.

6
7 **7-09.3(10) Backfilling Trenches**

8 *This section is supplemented by the following*

9
10 No recycled material shall be used for trench backfill. Unless otherwise specified,
11 Tacoma Water will require full depth CSTC for trench backfill and compacted in
12 accordance with the 2021 WSDOT Standard Specifications. The contractor will be
13 required to provide a current proctor of material for compaction testing. Compaction
14 testing will be paid under a separate bid item. CSTC shall also be placed in areas of
15 existing rock surfacing disrupted by the water main construction and in any other areas
16 where directed by the inspector and rolled with a power roller.

17
18 **7-09.3(11) Compaction of Backfill**

19 *This section is supplemented by the following*

20
21 Backfill shall be compacted to at least 95-percent of maximum density as specified in
22 Section 2-03.3(14)D.

23
24 At locations where paved streets, roadway shoulders, driveways, or sidewalks will be
25 constructed or reconstructed over the trench, the backfill shall be spread in layers and
26 compacted by mechanical tampers. In such cases, the backfill material shall be placed
27 in successive layers not exceeding 12-inches in loose thickness (or as specified in
28 Right of Way Permit), and each layer shall be compacted with mechanical tampers to
29 the density specified herein. Mechanical tampers shall be of the impact type as
30 approved by the Engineer.

31
32 Compaction test locations shall be at 100 linear foot intervals, with a minimum of two
33 compaction test locations per trench, or as directed by the Engineer. The Contractor
34 shall perform compaction testing each day main is installed.

35
36 At each compaction test location, compaction tests shall be taken on each compacted
37 layer, starting 18-inches above the pipe and finishing at the final ground surface. Each
38 layer shall be compacted to 95% modified proctor density, as verified by compaction
39 testing, before proceeding to place and compact the next layer. Compaction testing
40 will be performed by a licensed testing company with trained personnel in the presence
41 of the Tacoma Water Construction Inspector. Passing test will be based on a current
42 proctor of material used. Costs incurred for any proctor test, and failed compaction
43 test, are the responsibility of the Contractor.

44
45 Service transfer work by Tacoma Water will not commence until such time as the
46 trench has been successfully backfilled, as demonstrated through receipt of successful
47 compaction test results for that portion of water main placed in service.

1 **7-09.3(12) General Pipe Installation**

2 *The first sentence of the first paragraph is revised to read:*

3
4 Pipe shall be installed in accordance with the manufacturer's printed specifications
5 and instructions, and to the standards of the AWWA and DIPRA for installing the type
6 of pipe used.

7
8 **7-09.3(14) Cutting Pipe**

9 *This section is supplemented with the following:*

10
11 Short lengths of field cut pipe used for bell and spigot joints shall have a bevel of 30°
12 from center and ¼" from the end.

13
14 **7-09.3(16) Cleaning and Assembling Joint**

15 *This section is supplemented with the following:*

16
17 Only food-grade pipe lubricant as specified by the pipe manufacturer for potable water
18 shall be used on joints. It shall be delivered to the job in closed containers and shall
19 be kept clean. Pipe lubricant shall be in accordance with AWWA C111/A21.11-95
20 paragraph. 4.4.4, and NSF/ANSI Standard 61, latest edition.

21
22 **7-09.3(19)A Connections to Existing Mains**

23 *The section is supplemented with the following:*

24
25 When connecting new mains to existing, the Contractor shall swab out all new material
26 that will go into immediate service with a chlorine solution prior to installation. When
27 shutdowns for connection are required, the contractor will coordinate and schedule
28 with the inspector, a minimum of three working days prior to the scheduled time of
29 shutdown, to allow 48-hour notification to all customers. Cancellations of the shutdown
30 by the contractor after customer notification is made may result in a charge to the
31 contractor for re-notification.

32
33 The Contractor is advised that existing valves used to shut down mains for connections
34 are subject to leakage due to age and condition. The Contractor shall be prepared to
35 deal with water from leaking valves encountered. No additional compensation will be
36 made.

37
38 The Contractor is advised that only Tacoma Water crews may operate system valves.

39
40 The existing pipe shall be kept clean and free of debris as much as possible.

41
42 Coordination is an important part of this project so proper notification for shutdowns is
43 necessary, such that they can be scheduled without causing delays to the Contractor
44 or unanticipated interruption of service to Tacoma Water customers.

45
46 **7-09.3(19)B Maintaining Service**

47 *The section is supplemented with the following:*

48
49 Tacoma Water will furnish all labor and materials necessary to provide temporary (hi-
50 line) mains and services when necessary or as determined by the Construction
51 Inspector. The Contractor may have some down time waiting for services to be hi-

lined. No extra compensation will be made to the Contractor for down time due to work by City forces. No time will be charged towards the contract's time of completion while services are transferred.

Where existing services are to be transferred from old to new mains, the work of the Contractor shall be so planned and coordinated with that of Tacoma Water that consumers will be shut off as briefly as possible.

7-09.3(21) Concrete Thrust Blocking

This section is supplemented with the following:

Concrete thrust blocking shall conform to Standard Drawing 17-56-1. Concrete used for thrust blocking on mains eight inch and smaller shall meet the requirements of 6-02.3(4)B Jobsite Mixing, with a compressive strength at 28 days of a minimum 3,000 psi. Temporary thrust blocking may be revised or altered as approved by the Tacoma Water Construction Inspector.

7-09.3(23) Hydrostatic Pressure Test

This section is supplemented with the following:

Testing will only be accomplished with the approval and in the presence of the Tacoma Water Construction Inspector. The Tacoma Water Construction Inspector will provide his/her own set of pressure gauges. Testing will conform to DIPRA standards.

7-09.3(23)A Testing Extensions From Existing Mains

This section is supplemented with the following:

Testing will only be accomplished with the approval and in the presence of the Tacoma Water Construction Inspector. The Tacoma Water Construction Inspector will provide his/her own set of pressure gauges. Testing will conform to DIPRA standards.

7-09.3(23)B Testing Section with Hydrants Installed

This section is supplemented with the following:

Testing will only be accomplished with the approval and in the presence of the Tacoma Water Construction Inspector. The Tacoma Water Construction Inspector will provide his/her own set of pressure gauges. Testing will conform to DIPRA standards.

7-09.3(24)A Flushing

This section is revised to read:

In laying mains, care shall be taken to insure that the interior of the pipe is kept free of foreign matter or trench water. Upon completion of construction, the line shall be filled slowly under the direction of the Engineer and a pressure test conducted.

Sections of pipe to be disinfected shall first be flushed to remove any solids or contaminated material that may have become lodged in the pipe. If a hydrant is not installed at the end of the main, then a tap shall be provided large enough to develop a flow velocity of at least 2.5 fps in the water main.

1 Tacoma Water crews will flush, sample, and de-chlorinate newly installed water mains.
2 The Contractor is advised that only Tacoma Water crews shall operate system valves.
3

4 Water for testing and sterilizing will be furnished without charge to the Contractor at
5 such points as may be designated by the Inspector, in such quantities and at such
6 times as will not interfere with service to Tacoma Water customers.
7

8 **7-09.3(24)K Retention Period Flushing**

9 *This section is revised to read:*
10

11 The chlorinated water resulting from the initial filling shall be retained in the line for a
12 period of not less than 24 hours. After this period the chlorine residual at the pipe
13 extremities and at other representative points shall be at least 25 p.p.m. After which
14 Tacoma Water will remove the chlorinated water and thoroughly flush the line.
15 Tacoma Water shall take initial bacterial test samples of water flowing in the line upon
16 completion of the flushing.
17

18 A second set of bacterial test samples will be taken after a 24-hour retention period of
19 the water remaining in the pipe after the initial flushing. Should the samples not test
20 free of E coli and zero coli-form bacteria, the line shall be re-disinfected and re-flushed,
21 at the expense of the Contractor, until two successive satisfactory samples are
22 obtained.
23

24 Forty-eight hours is the minimum time required by the bacteriological laboratory to
25 process samples.
26

27 **7-09.3(24)N Final Flushing and Testing**

28 *This section is revised to read:*
29

30 The Tacoma Water Construction Inspector will determine the location of sample
31 stations and coordinate with Tacoma Water crews for installation. Corporation stops
32 with copper pipe stubs will be supplied and installed by Tacoma Water crews at
33 selected points along the pipeline for use as sampling stations and points to release
34 air, and apply test pressure.
35

36 The sampling stations will be removed by Tacoma Water crews after bacterial tests
37 and pressure tests are completed unless the station will be used for a new water
38 service lateral. Installation and removal of sample stations will be coordinated with the
39 Contractor. The water main contractor shall complete any excavation required for
40 installation and/or removal of the sample stations. The cost of all labor, equipment
41 and materials involved in the installation and removal of sample stations shall be
42 included in the various bid items of the contract.
43

44 Unless specified in the bid proposal or on the plans, Tacoma Water will furnish all labor
45 and materials necessary to provide new services or to transfer present services to the
46 new mains and to provide the required taps for testing and sterilizing.
47

48 Water for testing and sterilizing will be furnished without charge to the Contractor at
49 such points as may be designated by the Inspector, in such quantities and at such
50 times as will not interfere with service to Tacoma Water customers.
51

7-09.4 Measurement

This section is supplemented with the following:

The bid item for removal and replacement of unsuitable material will be measured by the cubic yard and shall only cover the materials as removed as part of the trench excavation. Replacement of unsuitable materials shall be paid per the Trench backfill specification.

The unit prices bid in the Proposal shall include all the accessories, gaskets, follower glands, nuts, bolts, etc., necessary to complete the project on the approved plans.

Trench Excavation and Disposal: Measurement of trench excavation and disposal of unsuitable material will be by cubic yard based upon on the tonnage of trench backfill placed and accepted by the Engineer and calculated as follows:

$$\text{Trench Excavation (CY)} = (\text{Trench Backfill* (Ton)} \times 0.87) \\ 1.35 \text{ Ton/CY}$$

*Note: Trench Backfill shall be the total of ticketed sand, CSTC, Topsoil Type A, and quarry spalls.

“____-inch Ductile Iron Pipe, ____ Joint, ANSI/AWWA, C151, Special Thickness Class No. 52, installed (various sizes): Measurement for water mains will be by the linear foot measured along the pipe less fittings, valves and couplings.

Mechanical Joint Fittings and couplings (various sizes and combinations): Measurement for fittings and couplings shall be per each.

Temporary Blow-Off Assemblies, installed and removed: Measurement for this item will be per each.

Restraining Glands (various sizes): Measurement for these items will be per each.

Push-On Joint Restraining Gaskets (various sizes): Measurement for these items will be per each.

____-inch Transition couplings with ____-inch center ring ____coating, and ____ bolts, ____ to ____ (various sizes): Measurement for these items will be per each.

____-inch End Cap Couplings, tapped ____-inch with ____-inch center ring ____Coating,& ____ bolts (various sizes): Measurement for these items will be per each.

Concrete Thrust Anchors, in place: Measurement for this item will be per each.

Temporary Thrust Anchors, in place, install and remove: Measurement for this item will be per each. The use of blocking/preformed structures will be at the discretion of the inspector.

Crushed Surfacing Top Course for Trench Backfill: Measurement for this item shall be per ton. It is the Contractor's responsibility to provide gravel tickets to Tacoma Water's inspector daily as materials are delivered.

Trench Compaction Test (as directed by the inspector), shall be per each for passing compaction test as per section 7-09.3(11) and 2-03(14)D. Test will be performed by a licensed testing facility with trained personnel in the presence of the Tacoma Water Construction Inspector. Passing test will be based on a current proctor of material used. Costs incurred for any proctor test and failing compaction test are responsibility of the contractor.

Force Account: The item shall conform to Section 1-09.6 of the Standard Specifications.

7-09.5 Payment

This section is revised to read:

“Trench Excavation and Disposal”, per cubic yard.

The unit contract price for “Trench Excavation and Disposal” shall be full pay for all labor, equipment and materials required for excavating and disposal of unsuitable materials. Trench and disposal requirements will be in accordance with WSDOT Standard Specifications as modified in these Special Provisions.

“____-inch Ductile Iron Pipe, _____ Joint ANSI/AWWA. C151 Special Thickness Class No. 52, to Furnish, Lay, and Test”, per linear foot.

The unit contract price per linear foot for each size of “____-inch Ductile Iron Pipe, _____Joint ANSI/AWWA. C151 Special Thickness Class No. 52, to Furnish, Lay, and Test” shall be full pay for all work to complete the installation of the water main including but not limited to furnishing, laying, jointing pipe, gaskets, gland/bolt kits, testing, flushing, disinfecting the pipeline and cleanup.

Payment for restoration will be made under the applicable items shown in the Proposal. If no pay items for restoration are included in the Proposal, restoration shall be considered incidental to the work of constructing the water main, and all costs thereof shall be included in the unit contract price for “____-inch Ductile Iron Pipe, Joint ANSI/AWWA. C151 Special Thickness Class No. 52, to Furnish, Lay, and Test”.

“____-inch Ductile Iron Reducer, _____ M.J., w/ Concrete Anchor, Installed”, per each.

The unit contract price for “____-inch Ductile Iron Reducer, _____M.J., w/ Concrete Anchor, Installed” shall be full pay for all labor, equipment and materials required for furnishing and installing these items including concrete anchor, gaskets and gland/bolts kits.

“____-inch Ductile Iron (fitting), M.J. _____ Installed”, per each.

The unit contract price for “____-inch Ductile Iron (fitting), M.J. _____ Installed” shall be full pay for all labor, equipment and materials required for furnishing and installing these items including gaskets and gland/bolts kits.

“____-inch Ductile Iron (cap/plug), M.J., Tapped _____-inch, Installed & Removed”, per each.

1
2 The unit contract price for “____-inch Ductile Iron (cap/plug), M.J., Tapped ____-inch,
3 Installed & Removed” shall be full pay for all labor, equipment and materials required
4 for furnishing, installing and removing these items including gaskets gland/bolts kits.

5
6 “____-inch Transition Coupling with ____-inch center ring, ____coating, and ____
7 bolts, ____ to D.I.”, per each.
8

9 The unit contract price for “____-inch Transition Coupling with ____-inch center ring,
10 ____coating, and ____ bolts, ____ to D.I.” shall be full pay for all labor, equipment
11 and materials required for furnishing and installing these items.
12

13 “Temporary ____-inch Blow-Off Assembly, Installed & Removed”, per each.
14

15 The unit contract price bid per each for “Temporary ____-inch Blow-Off Assembly,
16 installed & removed” shall be full pay for all work to install the blow-off assembly per
17 drawing 17-56-1, including but not limited to excavating, backfilling, laying and jointing
18 pipe, pipe and fittings, gate valve, meter box, cleanup and removal.
19

20 “____-inch Mechanical Joint Restraining Gland, Installed”, per each.
21

22 The unit contract price for “____-inch Mechanical Joint Restraining Gland, Installed“
23 shall be full pay for all labor, equipment and materials required for furnishing and
24 installing the specified item.
25

26 “____-inch Push-On Joint Restraining Gasket, Installed”, per each.
27

28 The unit contract price for “____-inch Push-On Joint Restraining Gasket, Installed “
29 shall be full pay for all labor, equipment and materials required for furnishing and
30 installing the specified item.
31

32 “Concrete Thrust Anchor, Installed”, per each.
33

34 The unit contract price for “Concrete Thrust Anchor, Installed“ shall be full pay for all
35 labor, equipment and materials required for furnishing and installing the specified item.
36

37 “Temporary Concrete Thrust Anchor, Installed and Removed”, per each.
38

39 The unit contract price for “Temporary Concrete Thrust Anchor, Installed and
40 Removed” shall be full pay for all labor, equipment and materials required for
41 furnishing, installing and removing the specified item.
42

43 “Crushed Surfacing Top Course for Trench Backfill”, per ton.
44

45 The unit contract price for “Crushed Surfacing Top Course for Trench Backfill per
46 section 9-03.9(3) of the 2021 WSDOT Standard Specifications, shoulder restoration,
47 and as directed by the inspector” shall be full pay for all labor, equipment and materials
48 required for furnishing and installing the specified item including delivery, spreading,
49 compacting and rolling.
50
51

1 "Trench Compaction Test (as directed by the inspector)", per each.

2

3 The unit contract price for "Trench Compaction Test (as directed by the inspector)"
4 shall be for passing compaction test as per sections 7-09.3(11), and 2-03(14)D.
5 Testing will be performed by a licensed testing company with trained personnel in the
6 presence of the Tacoma Water Construction Inspector, and shall be measured per
7 each passed test.

8

9

END OF SECTION

10

11

12

1
2 **7-12 VALVES FOR WATER MAINS**
3 **(Tacoma Water GSP)**
4

5 **7-12.4 Measurement**

6 *These sections are supplemented with the following:*
7

8 Measurement for ____-inch Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I.
9 Valve Box, will be per each.

10
11 Measurement for ____- inch Butterfly Valve, M.J., ANSI/AWWA, C504, with C.I.
12 Valve Box, will be per each
13

14 **7-12.5 Payment**

15 *These sections are supplemented with the following:*
16

17 *Payment will be made in accordance with Section 1-04.1, for each of the following Bid*
18 *items that are included in the Proposal:*
19

20 “____-inch Gate Valve, M.J., ANSI/AWWA, C509/C515, with C.I. Valve Box”, per
21 each.
22

23 The unit bid price for “____-inch Gate Valve, M.J., ANSI/AWWA, C509/C515, with
24 C.I. Valve Box, in place, per each” shall be full pay for all labor, equipment and
25 materials required to furnish and install valve. Bid item to include raising valve box to
26 finished grade per drawing 17-56-1, and to include concrete pad and asphalt patch at
27 valve box.
28

29 “____-inch Butterfly Valve, M.J., ANSI/AWWA, C504, with C.I. Valve Box, per
30 each.
31

32 The unit bid price for “____-inch Butterfly Valve, M.J., ANSI/AWWA, C504, with C.I.
33 Valve Box” shall be full pay for all labor, equipment and materials required to furnish
34 and install valve. Bid item to include raising valve box to finished grade per drawing
35 17-56-1, and to include concrete pad and asphalt patch at valve box.
36

37 **END OF SECTION**
38
39
40

1
2 **7-14 HYDRANTS**
3 **(Tacoma Water GSP)**
4

5 **7-14.3(1) Setting Hydrants**

6 *The second paragraph is revised to read:*
7

8 All hydrants shall be set on concrete blocks as shown on standard detail 17-56-1. The
9 hydrant barrel drain shall waste into a pit of porous gravel material meeting
10 specification 9-03.12(5), and situated at the base of the hydrant as shown on standard
11 detail 17-56-1.
12

13 *This section is supplemented with the following:*
14

15 Hydrant installation will conform to AWWA and DIPRA standards, and drawing 17-56-
16 1. No barrel extensions will be approved for new installations. The Contractor is
17 responsible for ensuring the proper bury of hydrant for grade is installed.
18

19 **7-14.3(2)A Hydrant Restraints**

20 *This section is supplemented with the following:*
21

22 Only approved restraining glands will be installed for hydrant restraints, unless shackle
23 rods are specified. No poured concrete thrust block will be placed on the back side of
24 the fire hydrants. If the hydrant lateral is longer than one full length of pipe, either
25 mechanical joint (MJ) pipe, approved push-on joint restraining gaskets or a ductile iron
26 solid sleeve with restraining glands will be installed to ensure correct location and
27 restraint of hydrant.
28

29 **7-14.3(6) Hydrant Extensions**

30 *This section is revised to read:*
31

32 No hydrant barrel extensions are approved on new installations.
33

34 **7-14.3(7) Removing Abandoned Hydrants**

35 *This section is added with the following:*
36

37 The contractor shall remove existing abandoned fire hydrants which were taken out of
38 service by this project or as noted to be removed on plans. Abandoned fire hydrants
39 shall be removed at the foot, laterals plugged and fire hydrants delivered to the
40 Tacoma Water Storeroom at South 35th Street and Union Avenue. All labor and
41 equipment costs are incidental to the contract.
42

43 **7-14.4 Measurement**

44 *This paragraph is supplemented with the following:*
45

46 Measurement of "6-inch Hydrant, M.J., ____-ft. bury, with ____-inch _____
47 Threads & ____-inch Quick Connect Coupling", will be made per each.
48
49

1 **7-14.5 Payment**

2 *This paragraph is supplemented with the following:*

3
4 "6-inch Hydrant, M.J., ____-ft. bury, with ____-inch _____ Threads & ____-
5 inch Quick Connect Coupling", per each.

6
7 The unit bid price for "6-inch Hydrant, M.J., ____-ft. bury, with ____-inch _____
8 Threads & ____-inch Quick Connect Coupling" shall be full pay for all labor, equipment
9 and materials required for furnishing and installing the hydrant including drain rock and
10 hydrant block. Restraining glands, lateral pipe, tee, and valve will be paid under
11 separate bid items.

12
13 **END OF SECTION**
14
15
16
17

1
2 **7-15 SERVICE CONNECTIONS**

3 *This section is supplemented with the following:*
4

5 There are 76 water service transfers throughout the project. New mains will be tested
6 and sampled in sections so Tacoma Water can commence with service transfers.
7 Following the successful completion of sampling, the Contractor shall anticipate down
8 time waiting for Tacoma Water crews to complete service transfers. The Contractor
9 shall anticipate one working day per service for Tacoma Water crews to complete
10 service transfers. All costs shall be included in the various bid items in the proposal
11 and no extra compensation will be made to the Contractor for down time due to work
12 by City forces. No time will be charged towards the contract's time of completion while
13 services are transferred.
14

15 Please note; Service transfer work by Tacoma Water will not commence until such
16 time as the section of water main has been placed into service and the trench has
17 been successfully backfilled, as demonstrated through receipt of successful
18 compaction test results for that portion of water main to be placed in service.
19

20 **END OF SECTION**

7-17 SANITARY SEWERS

(***)**

7-17.1 Description

This section is supplemented with the following:

All references to sanitary sewer shall also mean storm sewers.

7-17.2 Materials

The first paragraph is revised to read:

Pipe materials used for storm and sanitary sewers shall be as shown on plans. All references to PVC shall mean Solid Wall PVC Sewer Pipe. Profile Wall PVC will not be permitted.

This section is supplemented with the following:

Polyvinyl Chloride (PVC) Pressure Pipe (4-inches and over) 9-30.1(5)A

7-17.3 Construction Requirements

Supplement this section with the following:

Contractor shall be required to conduct successful pressure testing and television inspection before installing the permanent pavement patch.

Storm Main Spot Repair – South 4th Street

Tacoma Staff have identified an area in need of spot repair on S 4th Street approximately 100 feet west of South I Street. Contractor shall coordinate with the City Construction Inspector to determine the exact location and extents of the repair area.

SDR 35 PVC shall be used for the pipe replacement. Connections between the old and new pipe shall be completed with a rigid transition coupler, Romac 501 or approved equivalent.

(Tacoma Water GSP)

Supplement this section with the following:

Sewers may be encountered at various locations throughout this project. Prior to the start of the sewer repair, the Inspector and/or contractor shall notify the Tacoma Water Inspector. C900 PVC, Ductile Iron or 3034 PVC may be used on sewer line repairs. The repair of the sewer shall be made three feet outside of the water main trench. No additional compensation shall be made for the extended connection and material. Mechanical couplings (Romac or equivalent) shall be installed at both ends of the storm sewer restoration forming a rigid connection between the new and existing pipe. Rigid PVC slip couplings for PVC pipe and Romac mechanical style for concrete pipe only. Repair/replacement/restoration will be at the inspector's discretion and the local jurisdiction.

1 **7-17.3(2)A General**

2 *The first paragraph is revised to read:*

3
4 Sewers and appurtenances shall be cleaned and tested after backfilling by either
5 exfiltration or low-pressure air method at the option of the Contractor, except where
6 the ground water table is such that the Engineer may require the infiltration test.
7

8 **7-17.3(2)H Television Inspection**

9 *This section is revised to read:*

10
11 The Contractor shall hire a third-party television inspection company to perform
12 television inspection services on all new full segments and partial segments of sanitary
13 and storm sewer mains and side sewers, including the connection point between new
14 and existing pipes, and newly constructed manholes. The inspection video and
15 associated database file shall be submitted for review and final acceptance of the
16 pipes prior to paving where paving occurs over sewers, or prior to final acceptance in
17 non-paved areas, and allowing for any review timeframes as described below.
18

19 The Contractor shall provide the Contracting Agency 72 hours of advance notice so
20 that the Engineer may be present during the inspection if so elected. The video shall
21 be submitted for review which may take up to five (5) working days. If more than five
22 (5) working days are required for the Engineer's review of the videos, an extension of
23 time will be considered in accordance with 1-08.8. At a minimum, the video files shall
24 meet the technical requirements of 7-17.3(3). No claim will be allowed for damages,
25 or extensions of time resulting from the rejection of a video due to not meeting the
26 technical requirements or construction defects identified in the video.
27

28 CCTV inspection work shall be completed by certified National Association of Sewer
29 Service Companies (NASSCO) Pipeline Assessment and Certification Program
30 (PACP) trained operator(s) using established PACP coding and observations. Coding
31 and observation results shall be recorded and presented on a per asset basis,
32 manhole to manhole. A pipe asset is defined as one continuous pipe from the
33 upstream manhole to the downstream manhole. Footage shall be recorded with the
34 starting and ending points being the center of the manholes, with the exception that if
35 partial segments are constructed in this Contract, including side sewers, the inspection
36 only needs to show all new work up to and including the connection to the existing
37 pipe. The camera operator shall also pan around and record the inside of each
38 manhole constructed in this project at the start and end of each inspection. The
39 television camera shall have a resolution of 700 lines minimum and shall have a source
40 of illumination attached to it.
41

42 The video files shall be recorded and submitted in MPEG-2 format and include an
43 unmodified NASSCO-PACP Certified Access Database conducted entirely in digital
44 format with electronic reference to the survey which is intended to be imported into the
45 City's viewing software, GraniteNet. The PACP database shall include the City's SAP
46 pipe segment ID. No other file format will be accepted unless approved by the City.
47

48 All videos and database files shall be submitted via the Internet web-based project
49 management communications tool, e-Builder software.
50

1 The Contractor shall provide video identifying the pipe segment by manhole numbers
2 and pipe segment number. The inspection shall identify all connections, general
3 conditions of the sewer pipelines, problem areas, location of all connections or problem
4 areas by linear footage, and observations concerning the condition of the pipe joints.
5 The camera system used shall be capable of travelling up to 500 linear feet.
6

7 Although newly constructed, the sewers will likely be in service with flow present during
8 inspections. The lens shall remain clean and clear for the duration of the CCTV
9 inspection. Should the lens become soiled, or fogged, or otherwise impaired to any
10 degree that impedes the ability to clearly see the condition of the pipe, the inspection
11 shall be halted to clean and clear the lens. No additional compensation will be made
12 for re-inspections required by the City due to soiled, fogged, or otherwise impaired
13 camera lenses.
14

15 The Contractor shall maintain sufficient light levels within the main to allow for visual
16 inspection of the pipe walls for a minimum of four feet for all pipe sizes. Additionally,
17 the Contractor shall make certain that the light levels are not so bright that visual
18 inspection is impeded.
19

20 Each individual video inspection shall also include the associated video inspection
21 report for that segment which shall include the following information:

- 22 • Date of Inspection
- 23 • Main segment number (SAP)
- 24 • Upstream and Downstream Manhole Numbers (SAP)
- 25 • Street Location
- 26 • Setup (Normal or Reverse Flow)
- 27 • Pipe size and material
- 28 • Status (Active or Inactive) of all side sewers
- 29 • Location, length, and depth of water of sags
- 30 • Location and description of all other defects
31

32 The CCTV Inspection shall be a continuous, unedited video and shall include the
33 following information:

- 34 • Date of Inspection
- 35 • Main segment number
- 36 • Upstream and downstream manhole numbers
- 37 • Current distance along the mainline
38

39 In addition, the Contractor shall perform wastewater side sewer inspections where
40 they exist via a mainline camera with a lateral launching setup. The lateral launch
41 camera shall be capable of extending at least 30 feet from the main into side sewers
42 and shall include an on-screen footage counter. The quality of the side sewer
43 inspection shall meet the same requirements as the mainline camera. The lateral
44 launch camera be self-leveling and shall also include a sonde transmitter to locate the
45 side sewer in the event of a defect.
46

47 The Contractor shall bear all costs incurred in correcting any deficiencies found during
48 television inspection including the cost of any additional television inspection that may
49 be required by the Engineer to verify the correction of said deficiency.
50

The Contractor shall be responsible for all costs incurred in any television inspection performed solely for the benefit of the Contractor.

7-17.4 Measurement

This section is supplemented with the following:

Removal and replacement of unsuitable, contaminated and non-contaminated, backfill material will be determined by the cubic yard in place, based on a neat line measurement per this Section and Section 2-09. Any removal and replacement of unsuitable material outside neat line measurement shall be incidental to the Bid item.

Horizontal Limits: The horizontal limits shall be as defined in Section 2-09.4.

Longitudinal Limits: The longitudinal limits shall be as defined in Section 2-09.4.

Lower Limits: The lower limits shall be the top of the pipe zone as shown on Standard Plan SU-16.

Upper Limits: The upper limits shall be the subgrade elevation of the proposed roadway section or pavement patch section.

All costs associated with the disposal of material located above the upper limits shall be included in the unit contract price for other items of work, unless a proposal item is included for this specific item of work.

Pipe zone limits are as defined in Standard Plan SU-16.

No specific unit of measurement will apply for Contractor provided Television Inspection. All costs shall be included in the per foot price of pipe installed.

All cost associated with the Storm Drain Spot Repair on S 4th Street will be paid using the appropriate Bid items in the Proposal.

Reconnecting existing sewer pipes to new sewer pipes shall be considered incidental to the per linear foot price of the pipe and will not be measured for payment.

(Tacoma Water GSP)

Supplement this section with the following:

“Storm, Sanitary, and Side Sewer Restoration” will be measured per each. This Bid item only applies to sewer pipes that are damaged or that are required to be relocated as a direct result of water infrastructure construction.

7-17.5 Payment

The first paragraph is supplemented with the following:

“PVC _____ Sewer Pipe ____ In. Diam.”, per linear foot.

“PVC C900 Sanitary Sewer Pipe ____ In. Diam.”, per linear foot.

“Ductile Iron Sewer Pipe ____ In. Diam.”, per linear foot.

1
2 *The second paragraph is revised to read:*
3

4 The unit Contract price per linear foot for sewer pipe of the kind and size specified
5 shall be full pay for the furnishing, hauling, and assembling in place the complete
6 installation, including but not limited to, disposal of material excavated within the pipe
7 zone, furnishing and installing pipe bedding and backfill material within the pipe zone,
8 and all wyes, tees, special fittings, rigid couplings, joint materials, pressure testing,
9 cleaning, performing and submitting television inspection videos and reports, and
10 other appurtenances necessary for the completion of the installation to the required
11 line and grade, unless proposal items are included for these specific items of work.
12

13 *The pay item "Removal and Replacement of Unsuitable Material" is revised to read:*
14

15 "Removal and Replacement of Unsuitable Material", per cubic yard.
16

17 The unit Contract price per cubic yard for "Removal and Replacement of Unsuitable
18 Material" shall be full pay for all work required to haul and dispose of the unsuitable
19 material as specified in Section 7-08.3(1)A and the furnishing of suitable backfill
20 material as specified in Section 7-08.3(3).
21

22 For the purpose of providing a common proposal for bidders, the proposal quantity for
23 "Removal and Replacement of Unsuitable Material" is based on removal and
24 replacement of all backfill material.
25

26 **(Tacoma Water GSP)**

27 *Supplement this section with the following:*
28

29 "Storm, Sanitary, and Side Sewer Restoration", per each.
30

31 "Storm, Sanitary, and Side Sewer Restoration" includes any work and materials
32 required to remove and replace storm, sanitary, and side sewers. This is a per each
33 bid item that includes all costs but is not limited to excavation, pipe, fittings, bedding
34 and backfill materials, compaction, labor, and equipment, etc. to repair sewers.
35

36 **END OF SECTION**
37

1 **7-18 SIDE SEWERS**

2 **(*****)**

3
4 **7-18.1 Description**

5 *This section is supplemented with the following:*

6
7 The Contractor shall remove and replace existing side sewers as defined on the Plans
8 and reconnect the existing side sewer. The location of the side sewer at the main is
9 estimated based on a TV inspection of the main and may vary in either direction. The
10 actual location at the point of reconnection is unknown.

11
12 **7-18.3 Construction Requirements**

13 *Supplement this section with the following:*

14
15 **7-18.3(1) General**

16 *This section is supplemented with the following:*

17
18 The Contractor shall use solid wall PVC pipe meeting the requirements of Section 9-
19 05.12(1) for all side sewers located 10 feet or more from a water service. If the side
20 sewer is located within 10 feet of a water service, the Contractor shall use solid wall
21 PVC pressure pipe meeting the requirements of Section 9-30.1(5)A. If the side sewer
22 crosses above a water main, the side sewer shall be encased per the Department of
23 Ecology Criteria for Sewage Works Design (Orange Book) Section C1-9.1.4A. Any
24 encasement of side sewers shall be paid for under force account per Section 1-09.6.

25
26 When crossing under a water main, a minimum of 2 feet of vertical separation shall be
27 provided between the crown of the sewer lateral and the invert of the water main.

28
29 **7-18.4 Measurement**

30 *This section is supplemented with the following:*

31
32 Measurement for payment shall be by the linear foot of pipe installed, and shall be
33 along the pipe invert, through tees, wyes and other fittings, from the centerline of the
34 main to the centerline of the cleanout or end of side sewer pipe.

35
36 **7-18.5 Payment**

37 *The second paragraph is revised to read:*

38
39 "SDR 35 PVC Sanitary Sewer Pipe 6 In. Diam.", per linear foot.

40
41 "C900 PVC Sanitary Sewer Pipe 6 In. Diam.", per linear foot.

42
43 The unit Contract price per linear foot for sewer pipe of the various kind and size
44 specified shall be full pay for furnishing, hauling and assembling in place the completed
45 installation including all wyes, tees, special fittings, joint materials, bedding material,
46 and end pipe marker, and any other items necessary for the completion of the
47 installation, unless Proposal items are included for these specific items of Work.

48
49 The adaptor needed to convert from SDR 35 PVC to C900 PVC shall be included in
50 the per linear foot price for "C900 PVC Sanitary Sewer Pipe 6 In. Diam.".

51 **END OF SECTION**

1
2 **8-01 EROSION CONTROL AND WATER POLLUTION CONTROL**
3 **(April 1, 2018 Tacoma GSP)**
4

5 **8-01.1 Description**

6 *This section is supplemented with the following:*
7

8 The City of Tacoma Stormwater Management Manual is available on the City's website
9 at www.cityoftacoma.org/stormwatermanual.

10
11 The City of Tacoma has been issued a Washington State Department of Ecology
12 NPDES Construction Stormwater General Permit for this project. This Work also
13 consists of administration and compliance with the requirements of this permit for this
14 project. A copy of this permit is included in Appendix C of these Special Provisions.
15

16 **8-01.3 Construction Requirements**
17

18 **8-01.3(1) General**

19 *This section is supplemented with the following:*
20

21 The Contractor shall perform all work in compliance with the NPDES Construction
22 Stormwater General Permit issued for this project.
23

24 The permit shall be transferred to the Contractor prior to issuance of a Notice to
25 Proceed and terminated upon completion of the project per the following:
26

- 27 1. The City will provide the Contractor with a Transfer of Coverage form prior to
28 issuing a Notice to Proceed.
- 29 2. The Contractor shall sign and return the Transfer of Coverage form to the City.
- 30 3. The City will process the transfer and pay any associated transfer fees to the
31 Washington State Department of Ecology.
- 32 4. Once the transfer is complete and a Notice to Proceed has been issued, the
33 Contractor is responsible for performing all work in compliance with the permit
34 and the plans and specifications.
- 35 5. The Contractor shall pay any renewal fees if the need for permit renewal is caused
36 by contractor, otherwise the City will pay all renewal fees.
- 37 6. Upon Physical Completion of the Work the Contractor shall submit a Notice of
38 Termination to the Washington State Department of Ecology and provide the City
39 documentation that the termination is effective.
40

41 **8-01.3(1)A Submittals**

42 *This section is revised to read:*
43

44 The Contractor shall prepare and implement a project-specific Construction
45 Stormwater Pollution Prevention Plan (SWPPP) in accordance with the City of Tacoma
46 Stormwater Management Manual (SWMM), Volume 2. The SWPPP is a document
47 that describes the potential for pollution problems on a construction site and explains
48 and illustrates the measures to be taken on the construction site to control those
49 problems.
50

The Construction SWPPP shall be prepared as a stand-alone document consisting of two sections: Section 1) Construction SWPPP Narrative and Section 2) Temporary Erosion and Sediment Control (TESC) Plans.

The Contracting Agency has prepared the Construction Stormwater Pollution Prevention Plan Checklist to aid the Contractor in development of the SWPPP. This checklist provides the Contractor with a tool to determine if all the major items are included in the Construction SWPPP and on the TESC Plans and can be found in Volume 2, Chapter 2 of the SWMM. Contractors are encouraged to complete and submit this checklist with the Construction SWPPP.

The Department of Ecology has prepared a SWPPP template that can be used for projects in the City of Tacoma. The template can be found on Ecology's website at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.htm>. The Contractor developing the SWPPP must ensure that all references are appropriate for the City of Tacoma.

The SWPPP is considered a "living" document that shall be revised to account for additional erosion control/pollution prevention BMPs as they become necessary and are implemented in the field during project construction. A copy of the most current SWPPP and TESC Plan shall remain on-site at all times and an additional copy shall be forwarded to the Engineer. At the Contractor's preference, revisions to the SWPPP and TESC Plan may be forwarded to the Engineer rather than submitting a complete document. Revisions to the SWPPP and TESC Plan may be kept on-site in a file along with the original SWPPP document.

The Contractor shall provide Stormwater Pollution Prevention Plan inspection reports or forms per 8-01.3(1) B to the Project Engineer no later than the end of the next working day following the inspection.

8-01.3(1)B Erosion and Sediment Control (ESC) Lead

This section is revised to read:

The Contractor shall identify the ESC Lead at the Preconstruction Meeting and the contact information for the ESC Lead shall be added to the Stormwater Pollution Prevention Plan (SWPPP) Report and the Temporary Erosion and Sediment Control (TESC) Plan Sheet. The ESC Lead shall maintain, for the life of the contract, a current Certified Erosion and Sediment Control Lead (CESCL) certificate or maintain a current Certified Professional in Erosion and Sediment Control (CPESC) certificate from a course approved by the Washington State Department of Ecology. The CESCL or CPESC shall be listed on the Emergency Contact List required under Section 1-05.13(1).

The CESCL or CPESC shall direct implementation of the measures identified in the SWPPP and as shown on the TESC plan. Implementation shall include, but is not limited to the following:

1. Installing and maintaining all temporary erosion and sediment control Best Management Practices (BMPs) included in the SWPPP and as shown on the TESC plan. Damaged or inadequate BMPs shall be corrected as needed to

1 assure continued performance of their intended function in accordance with
2 BMP specifications and Permit requirements.

3 2. Performing monitoring as required by the NPDES Construction Stormwater
4 General Permit.

5 3. Inspecting all on-site erosion and sediment control BMPs at least once every
6 calendar week and within 24 hours of any discharge from the site. A SWPPP
7 Inspection report or form shall be prepared for each inspection and shall be
8 included in the SWPPP file. A copy of each SWPPP Inspection report or form
9 shall be submitted to the Engineer no later than the end of the next working
10 day following the inspection. The report or form shall include, but not be limited
11 to the following:

- 12 a. When, where, and how BMPs were installed, maintained, modified, and
13 removed.
- 14 b. Observations of BMP effectiveness and proper placement.
- 15 c. Recommendations for improving future BMP performance with
16 upgraded or replacement BMPs when inspections reveal SWPPP
17 inadequacies.
- 18 d. Approximate amount of precipitation since last inspection and when last
19 inspection was performed.

20 4. Updating and maintaining a SWPPP file on site that includes, but is not limited
21 to the following:

- 22 a. SWPPP Inspection Reports or Forms.
- 23 b. SWPPP narrative.
- 24 c. National Pollutant Discharge Elimination System Construction
25 Stormwater General Permit (Notice of Intent).
- 26 d. All documentation and correspondence related to the NPDES
27 Construction Stormwater General Permit.
- 28 e. Other applicable permits.

29
30 Upon request, the file shall be provided to the Engineer for review.

31 32 **8-01.3(7) Stabilized Construction Entrance**

33 *The third paragraph is revised to read:*

34
35 When the contract requires a wheel wash in conjunction with the stabilized entrance,
36 the details for the wheel wash and the method for containing and treating the sediment-
37 laden runoff shall be included as part of the SWPPP and TESC Plan.

38 39 **8-01.3(8) Street Cleaning**

40 *The third paragraph is revised to read:*

41
42 Street washing with water shall not be permitted.

43
44 *This section is supplemented with the following:*

45
46 The contractor shall remove debris on streets in areas of public traffic or where such
47 debris may be transported into a drainage system. The contractor shall, at a minimum,
48 remove on a daily basis any deposits or debris which may accumulate on the roadway
49 surface. Should daily removal be insufficient to keep the streets clean, the Contractor
50 shall perform removal operation on a more frequent basis.

Should the contractor fail or refuse to clean the streets, the Engineer may order the work suspended at the Contractor's risk until compliance with Contractor's obligations are assured, or the Engineer may order the streets cleaned by others and such costs incurred by the City in achieving compliance with the contract requirements, including cleaning of the streets, shall be deducted from moneys due or to become due the Contractor on a monthly estimate. The Contractor shall have no claim for delay or additional costs should the Engineer choose to suspend the Contractor's work until compliance is achieved.

8-01.3(9) Sediment Control Barriers

8-01.3(9)D Inlet Protection

Replace the third paragraph of this section with the following:

When the depth of accumulated sediment and debris reaches approximately 1/3 the height of an internal device or 1/3 the height of the external device (or less when so specified by the manufacturer), or as designated by the Engineer, the sediment and debris shall be removed and disposed of per SWMM BMP C220 or as specified on the Plans or within the SWPPP.

The section is supplemented with the following:

Only bag-type filters are allowed for use in the public right of way.

8-01.3(10) Wattles

The fifth and sixth sentences are revised to read:

On gradually sloped or clay-type soils trenches shall be 3 to 5 inches deep. On loose soils, in high rainfall areas, or on steep slopes, trenches shall be 3 to 5 inches deep, or 1/2 to 2/3 the thickness of the wattle.

8-01.4 Measurement

8-01.4(2) Item Bids

This section is supplemented with the following:

No specific unit of measurement shall apply to the lump sum item "Stormwater Pollution Prevention Plan (SWPPP)".

No specific unit of measurement shall apply to the lump sum item "NPDES Construction Stormwater General Permit".

8-01.5 Payment

8-01.5(2) Unit Bids

Supplement this section with the following:

Where removal of erosion control BMPs is directed by the Engineer according to 8-01.3(16) or according to these specification and the plans, removal shall be included in the lump sum or unit cost for these respective BMPs.

1 “Stormwater Pollution Prevention Plan (SWPPP)”, lump sum.

2

3 The lump sum contract price for “Stormwater Pollution Prevention Plan (SWPPP)”
4 shall be full pay for all costs, including but not limited to, preparing, submitting, revising,
5 and resubmitting revisions for the Stormwater Pollution Prevention Plan.

6

7 “NPDES Construction Stormwater General Permit”, lump sum.

8

9 The lump sum contract price for “NPDES Construction Stormwater General Permit”
10 shall be full pay for all costs, including but not limited to, transfer of coverage, sampling,
11 monitoring, reporting, coordinating, inspecting, materials and labor, and all fees and
12 any other expenses necessary to fully comply with the requirements of the Permit up
13 to and including termination of the Permit and completion of the Work. The lump sum
14 price shall also include all costs necessary to supply the City of Tacoma with copies
15 of all information as necessary to ensure compliance with the permit.

16

17

END OF SECTION

18

8-02 ROADSIDE RESTORATION

(***)**

8-02.1 Description

Supplement this section with the following:

The work shall also include hand weeding of existing groundcover areas to remain and salvaging and re-installation of Basalt Column as shown on the Plans.

8-02.2 Materials

Supplement this section with the following:

Topsoil Type A	Special Provisions 9-14.2(1)
Seed	Special Provisions 9-14.3
Fertilizer	Special Provisions 9-14.4
Fine Compost	Standard Specifications 9-14.5(8)
Arborist Wood Chip Mulch	Special Provisions 9-14.5(10)
Decorative River Rock	Special Provisions 9-14.9
Tree Watering Bag System	Special Provisions 9-14.10

8-02.3 Construction Requirements

Supplement this section with the following:

All disturbed landscaping and any roadside restoration, except for gravel restoration and those items identified under Removal of Structures and Obstructions or specifically shown on the Plans, shall be paid using the Landscape Restoration Bid item.

8-02.3(1) Responsibility During Construction

Supplement this section with the following:

Dumping or stockpiling of topsoil, compost, mulch, or any other landscape/construction materials shall not be allowed on roadway surfaces. The Contractor shall locate all underground utilities (both new and existing) prior to starting work and shall not disturb or damage them. Promptly notify the Engineer of any conflict between the proposed work and any obstructions. The Contractor shall be responsible for making any and all repairs for damage caused by his or her activities.

8-02.3(2) Roadside Work Plan

Supplement this section with the following:

The Roadside Work Plan shall apply to all work conducted as part of this project.

City of Tacoma Soil Amendment Requirements:

The Roadside Work Plan shall also include a Soil Management Plan that includes the following items:

1) An 11" X 17" or larger site map indicating:

a. Soil Amendment Type, as shown in the Plans, and square yardage;

b. Sequence of work in Soil Amendment areas;

2) Calculations for volumes of soil to be stockpiled and amounts of compost or topsoil to be imported to achieve specified minimum organic matter content.

3) IF CALCULATED AMENDMENT RATES ARE TO BE USED, characterize site soils to be amended and compost or alternative organic material for the following properties:

a. Soil - Bulk density, organic matter content and depth of compacted layers to a depth of 12-inches.

b. Compost or alternative organic material - Bulk density, organic matter content, carbon to nitrogen ratio, moisture content/percent solids.

c. Calculations by a Qualified Professional must be provided showing that the organic content requirements will be met based on the organic contents and densities of both the site soil and amendments. Qualified Professionals include Certified Soil Scientists, Crop Advisors or Agronomists; and Licensed Landscape Architects, Civil Engineers or Geologists.

8-02.3(3)B Planting and Lawn Area Weed Control

Supplement this section with the following:

Weeds within Existing Groundcover Areas, as noted on the plans, shall be removed by hand; damage to surrounding groundcover plants shall be minimized. The cost of removing weeds within Existing Groundcover Areas by hand and protecting existing groundcover plans shall be considered incidental to and included in the unit contract prices of other Bid items in this contract.

8-02.3(4) Topsoil

This section is supplemented with the following:

Soil amendment and subgrade preparation within Planter Areas and Lawn Restoration Areas where shown on the Plans shall be per City of Tacoma Standard Plan GSI-01d.

All grades shall be maintained in the areas to be planted or seeded in a true and even condition. The contractor shall be careful not to disturb any of the existing or cut slopes. Where final grades have not been established, the areas shall be finish graded and all surfaces left in an even and compacted condition. The finished grade shall be such that after planting, positive drainage shall also be maintained.

Areas around existing trees to remain shall not be cultivated within the tree drip line or any other areas which appear to have a significant number of existing tree roots, and any areas noted on the plan not to be cultivated.

The costs of removing all excess material and debris shall be considered incidental to and included in the unit contract prices of other Bid items in this contract.

1 **8-02.3(5)B Lawn Area Preparation**

2 *This section is supplemented with the following:*

3
4 Lightly compact soil to 85% maximum dry density and establish a smooth and uniform
5 finished grade to allow to surface drainage and prevent ponding, positive drainage
6 shall also be maintained.

7
8 The areas shall be brought to a uniform grade, 1-inch below walks, curbs, junction and
9 valve boxes, and driveways, unless otherwise specified.

10
11 Remove excess material, stumps, wood or rocks over 1 inch in diameter and remove
12 from site.

13
14 **8-02.3(5)C Planting Area Preparation**

15 *This section is supplemented with the following:*

16
17 Lightly compact soil to 85% maximum dry density and establish a smooth and uniform
18 finished grade to allow to surface drainage and prevent ponding, positive drainage
19 shall also be maintained.

20
21 The areas shall be brought to a uniform grade, 1-inch plus the specified depth of
22 mulch, below walks, curbs, junction and valve boxes, and driveways, unless otherwise
23 specified.

24
25 Remove excess material, stumps, wood or rocks over 2 inches in diameter and remove
26 from site.

27
28 **8-02.3(6)B Fertilizers**

29 *This section is supplemented with the following:*

30
31 Trees and shrubs shall be fertilized at a rate according to manufacturer's
32 recommendations. Fertilizer tablets shall be considered incidental to and included in
33 the unit contract price for trees and shrubs.

34
35 Fertilizers shall be as specified in Section 9-14.4 Fertilizer, of these Special Provisions.

36
37 **8-02.3(8)A Dates and Conditions for Planting**

38 *This section is supplemented with the following:*

39
40 All plant material shall be transported to planting locations with care to prevent
41 damage. Tie back branches as necessary and protect bark from chafing with burlap
42 bags. Do not drag plant materials along ground without proper protection of roots and
43 branches.

44
45 Protect rootballs from environmental or mechanical damage and water as necessary
46 to keep roots moist.

47
48 The Contracting Agency shall reserve the option of selecting and inspecting plant
49 material at the nursery. The Contractor shall provide the Contracting Agency with at
50 least one week notice prior to preparing plants for shipping and delivery. The

Contractor shall neither deliver to site nor install plant materials until authorized by the Contracting Agency.

Cold storage of plants shall not be permitted.

If planting is delayed more than 24 hours after delivery, set balled and burlapped plants on the ground, well protected with soil or wet peat. Adequately cover all roots of bare root material with soil or wet peat. Protect rootballs from freezing, sun, drying winds or mechanical damage. Water plant material as necessary until planted.

Plants shall not be stored for more than one week. Longer storage period at project site will result in rejection of plant materials by the Contracting Agency.

8-02.3(8)B Plant Installation

This section is supplemented with the following:

All trees, shrubs, groundcovers and other landscape materials shall be planted as detailed on the Plans.

Scarify sides and bottom of all planting pits prior to planting. Sufficient planting soil shall be placed around the plant and compacted so as to ensure that the location of the ground line at the top of the root ball is the same as the nursery.

Plant trees and shrubs upright and face to give best appearance or relationship to adjacent structures and hold rigidly in position until planting soil has been backfilled and tamped firmly around the root ball or roots.

Balled and burlapped plants shall be placed in the planting pits with the burlap intact; then the binding shall be removed and all of the burlap or cloth wrapping materials shall be removed from the root ball. Remove all plastic, twine and ropes. The plant shall be rejected if the root ball is cracked or broken during removal of wrapping or during the planting process.

When the pit is backfilled halfway, place the specified quantity of fertilizer in planting pit, unless otherwise specified on the plans. Evenly spread fertilizer adjacent to the root system at a depth that is between the middle and the bottom of the root system. Do not injure root system. Place and compact planting topsoil carefully to avoid injury to roots; fill all voids.

When pit is three-quarters (3/4) backfilled, completely fill with water and allow water to soak away. If water does not drain within ½ hour notify Engineer; tree planting pits which do not drain properly may require drain-rock sump to facilitate drainage. Fill pits with additional soil to finish grade and continue backfilling as detailed on plans.

Install Tree Watering Bag System per manufacturer's recommendations where shown on the Plans. Tree Watering Bag System shall conform to Section 9-14.10 Tree Watering Bag System, of these Special Provisions and shall be supplied by a Contractor's supplied source, and as approved by the Engineer.

1 **8-02.3(8)C Pruning, Staking, Guying and Wrapping**

2 *This section is supplemented with the following:*

3
4 Crossed or rubbing branches shall be removed providing the natural shape of the tree
5 is preserved. Under no circumstances shall pruning be done prior to inspection and
6 approval of plants by the Engineer. All cuts shall be made flush with the parent stem
7 leaving no stubs. Pruning cuts shall be made in a manner to favor the earliest possible
8 covering of the wound by callus growth. Cuts that produce large wounds and weaken
9 the tree will not be acceptable.

10
11 Top growth removal to compensate for root loss shall not exceed one-third (1/3) of the
12 top growth unless otherwise specified or directed by the Engineer. Cuts created 3/4
13 inch in diameter shall be treated with an approved tree wound dressing. All pruning
14 shall produce a clean cut without bruising or tearing the bark and shall be in living
15 wood where the wood can properly heal over.

16
17 Evergreens shall not be pruned, except to remove injured branches. The use of pole
18 shears and/or hedge shears for pruning deciduous and evergreen trees will not be
19 permitted. All trimmings and other debris left over from the planting operations shall
20 be collected and disposed of off the site.

21
22 All evergreen trees and deciduous trees over 15 feet in height shall be guyed with
23 three wires or cables.

24
25 All deciduous and evergreen trees shall be staked the same day of planting.

26
27 **8-02.3(10)A Dates and Conditions for Lawn Installation**

28 *This section is supplemented with the following:*

29
30 Where no irrigation system is to be installed, the lawn shall be placed during the
31 following period only:

32
33 March 1st – June 30th

34 September 1st - October 25

35
36 **8-02.3(11)B Bark or Wood Chip Mulch**

37 *The third sentence of the first paragraph is revised to read:*

38
39 Mulch shall be feathered to plant material trunks, stems, canes, or root collars, and
40 one inch below the top of junction and valve boxes, curbs and pavement edges.

41
42 *This section is supplemented with the following:*

43
44 Mulch shall be Arborist Wood Chip Mulch in accordance with Section 9-14.5(10) shall
45 be applied to a depth of 3 inches at the locations indicated on the Plans or as directed
46 by the Engineer.

1 **8-02.3(13) Plant Establishment**

2 *This section is revised to read:*

3
4 The Contractor shall maintain the planting areas and all plants planted within the
5 project limits to ensure the resumption and continued growth of the planted material
6 until physical completion of the contract.

7
8 Maintenance shall include, but not be limited to, labor and materials necessary for
9 removal of foreign, dead, or rejected plant material, maintaining a weed-free condition,
10 and the replacement of all unsatisfactory plant material planted under the contract.

11
12 Planting dates for replacement plant material will be approved by the Engineer.

13
14 The Contractor shall meet with the Engineer for the purpose of joint inspection of the
15 project once installation has been completed and thereafter on a periodic "as needed"
16 basis as determined by the Engineer, until the physical completion date of the contract.

17
18 All conditions unsatisfactory to the Engineer shall be corrected by the Contractor within
19 a ten-day period immediately following the inspection. Failure to comply with
20 corrective steps as outlined by the Engineer shall constitute justification of the
21 Contracting Agency to take corrective steps and to deduct all costs thereof from any
22 monies due the Contractor.

23
24 The Contractor shall replace all plants stolen or damaged by the acts of others until
25 the physical completion date of the contract.

26
27 **8-02.3(14) Plant Replacement**

28 *This section is revised to read:*

29
30 The Contractor shall provide the Contracting Agency a one (1) year non pro-rated, full
31 labor and materials warranty for all planted material. The warranty shall cause the
32 Contractor to remove and replace all rejected plant material during the warranty period.
33 The warranty period shall begin at the date of physical completion of the contract and
34 end one calendar year from that date.

35
36 The Contractor shall be responsible for growing or providing enough plants for
37 replacement of all plant material rejected during the warranty period. All rejected plant
38 material shall be replaced at dates approved by the Engineer.

39
40 All replacement plants shall be of the same species and quality as the plants they
41 replace. Plants may vary in size reflecting one season of growth should the Contractor
42 elect to hold plant material under nursery conditions for an additional year to serve as
43 replacement plants.

44
45 Replacement plants will be subject to the original warranty provision as stated above.
46
47

1 *Add the following new section:*

2
3 **8-02.3(17) Landscape Restoration**

4
5 Landscape Restoration shall consist of placement of additional plant materials, seed
6 and bark mulch in order to restore all disturbed areas to original condition or better, as
7 directed by the Engineer.

8
9 All materials shall conform to Sections 9-14 Erosion Control and Roadside Planting
10 and 9-15 Irrigation System of the Standard Specifications. Topsoil shall be Type A and
11 Bark Mulch shall be Arborist Wood Chip Mulch. Grass areas shall be restored with
12 hydroseed where directed.

13
14 The Contractor is specifically reminded that any unnecessary damage caused by
15 construction activities will be repaired at the Contractor's expense.

16
17 The Contractor is advised that protecting existing landscape areas and private
18 irrigation and lighting systems from damage does not constitute a basis for claim or
19 extra work. "Landscape Restoration" has been provided as a basis for modifications
20 or improvements to landscape areas, private lighting systems and irrigation systems
21 that may become necessary but could not be foreseen prior to construction.

22
23 **8-02.3(18) Salvaged Basalt Column**

24 *Add the following new section:*

25
26 Existing basalt column and bollards, including (1) one 8-foot-high central basalt
27 column and (5) five surrounding 4-foot-high basalt bollards with chain attachments,
28 shall be removed prior to the start of construction activities. Basalt column shall be
29 stored and protected until it can be reinstalled where shown on the Plans; basalt
30 bollards and chain attachments shall be salvaged and transported to the Owner.

31
32 Removal shall include removal and haul of any existing concrete footings, which shall
33 be disposed of offsite. Protect basalt column from environmental and mechanical
34 damage throughout removal, transportation, storage and reinstallation.

35
36 Basalt column shall be reinstalled where shown and as detailed on the Plans. Basalt
37 column shall be buried to the same depth and the Contractor shall be responsible for
38 installing a footing of like size and type to what was originally installed. Location,
39 configuration, excavation depth and footing design shall be approved in the field by
40 the Engineer prior to installing basalt column.

41
42 **8-02.3(19) Decorative River Rock**

43 *Add the following new section:*

44
45 Decorative River Rock shall be placed to the depth and where shown on the Plans.
46 Layout of Decorative River Rock Edge shall be staked in the field for approval by the
47 Engineer prior to installation of Decorative River Rock.

Decorative River Rock shall conform to Section 9-14.9 Decorative River Rock, of these Special Provisions and shall be supplied by a Contractor's supplied source, and as approved by the Engineer.

8-02.4 Measurement

This section is supplemented with the following:

The pay quantities for the plant materials will be determined by count of the number of satisfactory installed trees, shrubs, groundcover and other landscape materials accepted by the Engineer.

Irrigation water used to establish vegetation will be considered included in the cost of plants.

"Topsoil Type A", "Arborist Wood Chip Mulch", and "Decorative River Rock" shall be measured by the cubic yard in the haul conveyance at the point of delivery.

"Seeded Lawn Installation" shall be measured by the square yard along the ground slope line of actual lawn installed, established and accepted by the Engineer.

"Landscape Restoration" shall be paid by force account per Section 1-09.6.

No specific unit of measure shall apply to the lump sum bid item for "Salvaged Basalt Column".

8-02.5 Payment

The pay item for "Plant Selection" is revised to read

"Plant Selection ____", per each.

Payment for "Plant Selection ____" shall be full pay for all materials, labor, tools, equipment and supplies necessary for weed control within planting areas, planting area preparation, fine grading, planting, fertilizing, cultivating, and clean-up for the particular items called for in the Plans until the physical completion date of the contract. A one (1) year plant warranty shall be included in the unit contract price. Providing and installing Tree Watering Bag System and tree stakes shall be considered incidental to and included in the unit cost for trees.

Supplement this section with the following:

"Topsoil Type____", per cubic yard

The unit contract price per cubic yard for "Topsoil Type ____" shall be full pay for providing the source of material for Topsoil Type A and C, for pre-excavation weed control, excavating, loading, hauling, intermediate windrowing, stockpiling, weed control on stockpiles or windrows, and removal, placing, spreading, processing, cultivating, and compacting topsoil Type A, Type B, and Type C.

1 "Arborist Wood Chip Mulch", per cubic yard.

2

3 The unit contract price per cubic yard for "Arborist Wood Chip Mulch" shall be full pay
4 for furnishing and spreading the mulch as specified and as shown in the Plans.

5

6 "Seeded Lawn Installation", per square yard.

7

8 The unit contract price per square yard for "Seeded Lawn Installation" shall be full pay
9 for fine grading soil and hydroseeding as specified and as shown in the Plans

10

11 "Decorative River Rock", per cubic yard.

12

13 The unit contract price per cubic yard for "Decorative River Rock" shall be full pay for
14 furnishing and spreading the rock as specified and as shown in the Plans.

15

16 "Salvaged Basalt Column", lump sum.

17

18 The lump sum contract price for "Salvaged Basalt Column" shall be full pay for
19 removing basalt column; removing basalt bollards with chain attachments and
20 salvaging to owner; chipping and removing any existing concrete or other footings;
21 salvaging, storing, and re-installing column, including concrete or other
22 footings/foundations to match existing configuration and dimension. Excavation and
23 removal of subgrade, any existing concrete footing materials, gravel setting bed and
24 backfill shall be considered incidental to and included in the lump sum price.

25

26 *Paragraphs 7 through 18, pertaining to partial payment, are deleted.*

27

28 *Supplement this section with the following:*

29

30 "Landscape Restoration", force account.

31

32 Restoring damaged vegetated areas not specifically shown on the Plans within the
33 Contractor work limits will be paid for by force account as specified in Section 1-09.6.
34 To provide a common Proposal for all Bidders, the Contracting Agency has estimated
35 the amount of force account for "Landscape Restoration" and has entered the amount
36 in the Proposal to become a part of the total Bid by the Contractor. Areas damaged
37 outside the general limits of the project shall be restored by the Contractor at no
38 expense to the Contracting Agency.

39

40 Work elements will include, but not be limited to, topsoil, seeding, bark mulch, and
41 replacing plants and shrubs, and restoring existing landscape irrigation and lighting
42 systems. Payment for "Landscape Restoration" also includes all labor, material, tools,
43 and equipment necessary to satisfactorily complete restoration activities behind the
44 back of walk/back of curb that are necessary but could not be foreseen prior to
45 construction and are therefore not noted herein or on the Plans.

46

47 "Landscape Restoration" does not apply to the work required at the pocket park south
48 of 6th Avenue (Approximately STA 403+00). All work at the pocket park shall be paid
49 for by the individual Bid items in Schedule C.

50

1 "Landscape Restoration" shall only apply to restoration within planter strips at the back
2 of curb.

3

4

END OF SECTION

5

1
2 **8-04 CURBS, GUTTERS, AND SPILLWAYS**
3 **(April 1, 2018 Tacoma GSP)**
4

5 **8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways**

6 *The first paragraph is revised to read:*
7

8 Cement concrete curb, curb and gutters, gutters, and spillways shall be constructed
9 with air entrained concrete Class 3000 conforming to the requirements of Section 6-
10 02.
11

12 *Section 8-04.3 Construction Requirements is supplemented with the following:*
13

14 **8-04.3(6) Cold Weather Work**
15

16 The following additional requirements for placing concrete shall be in effect from
17 November 1 to April 1:
18

- 19
- 20 • The Engineer shall be notified at least 24 hours prior to placement of concrete.
 - 21 • All concrete placement shall be completed no later than 2:00 p.m. each day.
 - 22 • Where forms have been placed and the subgrade has been subjected to frost, no
23 concrete shall be placed until the ground is completely thawed. At that time, the
24 forms shall be adjusted and subgrade repaired as determined by the Engineer.

25 **END OF SECTION**
26

1
2 **8-06 CEMENT CONCRETE DRIVEWAY ENTRANCES**

3 **(*****)**

4
5 **8-06.3 Construction Requirements**

6 *The first paragraph is revised to read:*

7
8 Driveway/alley entrances shall be constructed with Class 4000, 3 Day air entrained
9 concrete conforming to the requirement of Section 6-02 of the Standard Specifications.

10
11 *This section is supplemented with the following sub-section:*

12
13 **8-06.3(1) Cold Weather Work**

14
15 The following additional requirements for placing concrete shall be in effect from
16 November 1 to April 1:

- 17
18
 - 19 • The Engineer shall be notified at least 24 hours prior to placement of concrete.
 - 20 • All concrete placement shall be completed no later than 2:00 p.m. each day.
 - 21 • Where forms have been placed and the subgrade has been subjected to frost, no
22 concrete shall be placed until the ground is completely thawed. At that time, the
23 forms shall be adjusted and subgrade repaired as determined by the Engineer.

24 **8-06.4 Measurement**

25 *Supplement this section with the following:*

26
27 The rolled cement concrete curb associated with the North Slope Historic District
28 Driveway Entrance type shall be measured and paid for as "Commercial Cement
29 Conc. Alley/Driveway Entrance, 3-day".

30
31 **8-06.5 Payment**

32 *The third paragraph is revised to read:*

33
34 Excavation required for the construction of the driveway entrance shall be paid for
35 under the unit Contract price for "Roadway Excavation, Incl. Haul" when included in
36 the Proposal. Otherwise, the Contractor shall include all costs associated with
37 excavating, including haul and disposal, regardless of the depth in the unit Contract
38 price for "Commercial Cement Conc. Alley/Driveway Entrance, 3-day".

39
40 The unit price for "Commercial Cement Conc. Alley/Driveway Entrance, 3-day" shall
41 include installation of truncated domes where applicable.

42
43 **END OF SECTION**
44

1
2 **8-13 MONUMENT CASES**
3 **(March 17, 2003 Tacoma GSP)**
4

5 *This section is revised to read:*
6

7 **8-13 MONUMENTS**
8

9 **8-13.1 Description**
10

11 This Work shall consist of constructing monuments in accordance with the Standard
12 Plan and these Specifications, in conformity with the lines and locations shown in the
13 Plans or as staked by the Engineer.
14

15 **8-13.2 Materials**
16

17 Concrete shall be Class 3000 in accordance with the requirements of Section 6-02.
18 'Ready Mix' bag concrete shall not be used.
19

20 Bronze markers will be supplied by the Contracting Agency on City funded projects.
21

22 **8-13.3 Construction Requirements**
23

24 The Contractor shall construct the poured monument in accordance with the City of
25 Tacoma Standard Plan SU-01.
26

27 **8-13.4 Measurement**
28

29 Measurement of the poured monument will be per each.
30

31 **8-13.5 Payment**
32

33 Payment will be made in accordance with Section 1-04.1.
34

35 "Poured Monument", per each.
36

37 The unit Contract price per each for "Poured Monument" shall be full pay for all labor,
38 equipment, and materials required to furnish and install the monument, including the
39 removal of existing monuments and necessary pavement removal to accommodate
40 the installation in accordance with the standard plan and specifications.
41

42 **END OF SECTION**
43

1
2 **8-14 CEMENT CONCRETE SIDEWALKS**
3 **(March 23, 2010 Tacoma GSP)**
4

5 **8-14.3 Construction Requirements**
6

7 **8-14.3(4) Curing**

8 *The second sentence is revised to read:*
9

10 Curing shall be in accordance with Section 5-05.3(13).
11

12 *Section 8-14 is supplemented with the following:*
13

14 **8-14.3(20) Cold Weather Work**
15

16 The following additional requirements for placing concrete shall be in effect from
17 November 1 to April 1:
18

- 19 • The Engineer shall be notified at least 24 hours prior to placement of concrete.
- 20 • All concrete placement shall be completed no later than 2:00 p.m. each day.
- 21 • Where forms have been placed and the subgrade has been subjected to frost, no
- 22 concrete shall be placed until the ground is completely thawed. At that time, the
- 23 forms shall be adjusted and subgrade repaired as determined by the Engineer.
24

25 **8-14.3(21) Thickened Edge for Sidewalk**
26

27 Thickened edge shall be constructed in accordance with the standard plan.
28

29 **8-14.5 Payment**

30 *The pay item "Cement Conc. Sidewalk" is supplemented with the following:*
31

32 All additional costs related to the construction of thickened edges shall be included in
33 the unit contract cost for "Cement Conc. Sidewalk".
34

35 All sidewalk shall be measured and paid for as "Cement Conc. Sidewalk", regardless
36 of the required scoring pattern.
37

38 *The sixth paragraph is revised to read:*
39

40 Excavation required for the construction of the sidewalk shall be paid for under the unit
41 contract price for "Roadway Excavation, Incl. Haul" when included in the proposal.
42 Otherwise, the Contractor shall include all costs associated with excavating, including
43 haul and disposal, regardless of the depth in the unit contract price for "Cement Conc.
44 Sidewalk".
45

46 **END OF SECTION**
47
48

1
2 **8-21 PERMANENT SIGNING**

3 **(*****)**

4
5 **8-21.1 Description**

6 *Supplement this Section with the following:*

7
8 Work also includes removing existing signing and reinstalling them on new posts with
9 new hardware. Work shall also include providing, installing, maintaining, and
10 removing two (2) Project Signs as detailed on the Plans at the locations specified by
11 the Engineer in the field.
12

13 **8-21.3 Construction Requirements**

14 *Supplement this Section with the following:*

15
16 All signs shall be installed per Tacoma Standard Detail SU-34.
17

18 Upon completion of the project, the Contractor shall reset all signs, which have been
19 disturbed or removed during the construction, in their permanent location to the
20 satisfaction of the Owner.
21

22 If the Owner determines that the condition of the existing signs are not of sufficient
23 quality to reinstall, the Owner will provide the Contractor with new signs to reinstall.
24

25 Sign spacing from edge of pavement or face of curb shall be per WSDOT Standard
26 Plan G-20.10-02.
27

28 The Contractor shall provide and install Project Signs in accordance with the contract
29 documents 2 working days in advance of any on site construction activities.
30 Installation of the signs shall be in accordance with the detail provided on the Plans.
31

32 **8-21.4 Measurement**

33 *Supplement this section with the following:*

34
35 Furnishing, installing, maintaining, protecting, relocating (if necessary), removing and
36 disposing of the Project Signs shall be included under "Permanent Signing" and shall
37 not be measured for separate payment.
38

39 **END OF SECTION**
40
41
42

1
2 **8-22 PAVEMENT MARKING**

3 **(*****)**
4

5 **8-22.3 Construction Requirements**

6 *Supplement this section with the following:*
7

8 Contractor shall be required to reference existing channelization prior to removal and
9 then restore channelization disturbed during construction in-kind at the preconstruction
10 locations.

11
12 Channelization configuration and material shall be per City of Tacoma Standard Plans.
13

14 **END OF SECTION**
15

1
2 **8-23 TEMPORARY PAVEMENT MARKINGS**
3 **(*****)**

4
5 **8-23.4 Measurement**

6 *Delete this section with the following:*

7
8 Applying, maintaining, and removing temporary pavement markings where permanent
9 pavement markings are disturbed as a result of construction activities shall be
10 considered essential to the project and will not be measured for payment.

11
12 **END OF SECTION**
13
14

1
2 **9-03 AGGREGATES**
3 **(September 20, 2018 Tacoma GSP)**
4

5 **9-03.1 Aggregates for Portland Cement Concrete**
6

7 **9-03.1(1) General Requirements**
8 **(June 16, 2016 Tacoma GSP)**
9 *The seventh paragraph is deleted.*
10

11 **9-03.21 Recycled Material**
12

13 **9-03.21(1) General Requirements**
14 **(Jun 16, 2016 Tacoma GSP)**
15 *This section is supplemented with the following:*
16

17 Recycled materials will only be permitted upon approval of the Engineer. Recycled
18 concrete shall not be permitted for use as pipe zone backfill, backfill above pipe zone,
19 and extra excavation area backfill material.
20

21 **END OF SECTION**
22
23

9-14 EROSION CONTROL AND ROADSIDE PLANTING

(*****)

9-14.2(1) Topsoil Type A

Supplement this section with the following:

Topsoil Type A shall be a mixture of 50% pure compost, and 50% sand, sandy loam, or silty sand. The compost shall be fully composted and mature organic materials. No fresh sawdust or other fresh wood by-products shall be added to extend the volume after the composting process.

Chemical/physical characteristics shall comply with the following:

Screen Size (approx. Particle size)	7/16" maximum
Total Nitrogen	.25% minimum
Organic Matter	10% minimum
pH Range	5.5-7.5
Conductivity	5 mmhos/cm maximum

Compost shall be 98% minimum material derived from the aerobic decomposition of recycle plant waste and/or secondary sewage treatment. It shall be free of viable weeds and other plant propagules and shall have a moisture content that has no visible free water or dust produced when handling the material.

Contractor shall provide a complete analysis of the Topsoil Type A, with a (1) cubic foot sample for review and approval.

9-14.3 Seed

Supplement this section with the following:

The grass seed dealer shall mix the grass seed only. The Contractor shall furnish the Engineer with a dealer's guaranteed statement of the composition, mixture, and the percentage of purity and germination of each variety.

All seed mixes shall be certified as 99% weed-free and 90% viable seeds by germination tests and by age specifications by species. Apply hydroseed mulch, tackifier, seed and fertilizer per supplier's recommendations, or per these Special Provisions.

All seeding areas shall be seeded with the following mix:

Type of Seed	% by Weight
Lolium perenne var. Dasher 3/ Dasher 3 Perennial Ryegrass	35%
Lolium perenne var. Cutter II/ Cutter II Perennial Ryegrass	35%
Festuca rubra var. Garnet/ Garnet Creeping Red Fescue	15%

Festuca rubra ssp. fallax var. Woodward/ Windward Chewings Fescue	15%
--	-----

The rate of application shall be as recommended by the seed supplier.

9-14.4 Fertilizer

Supplement this section with the following:

All fertilizer applications shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards.

Fertilizer shall be 10-10-10, applied at a rate recommended by the fertilizer manufacturer.

All fertilizers shall be furnished in standard unopened containers with weight, name of plant nutrients and manufacturer's certified statement of analysis clearly marked, in accordance with State and Federal law.

9-14.5(10) Arborist Wood Chip Mulch

Supplement this section with the following:

Quality: Arborist Wood Chip Mulch shall be coarse ground wood chips (approximately ½" to 6" along the longest dimension) derived from the mechanical grinding or shredding of the above-ground portions of trees. It may contain wood, wood fiber, bark, branches, and leaves; but may not contain visible amounts of soil. It shall be free of weeds and weed seeds including but not limited to the plants on the Pierce County Noxious Weed list (www.piercecountyweedboard.wsu.edu) and shall be free of invasive plant portions capable of resprouting, including but not limited to horsetail, ivy, clematis, knotweed, etc. It may not contain more than ½% by weight of manufactured inert material (plastic, concrete, ceramics, metal, etc.).

1. **Gradation.** Arborist Wood Chip Mulch, when tested, shall meet the following loose volume gradation:

Sieve Size	Percent Passing	
	Minimum	Maximum
2"	95	100
1"	70	100
5/8"	0	50
¼"	0	40

No Particles may be longer than eight inches.

2. **Submittals.** At the Engineer's request, prior to delivery the contractor shall provide the following:

- a. The source of the product and the species of trees included in it;
- b. A sieve analysis verifying the product meets the above size gradation requirement; and,
- c. A 5 gallon sample of the product, for the Engineer's approval.

1 **9-14.7 Plant Materials**

2 *Supplement this section with the following:*

3
4 **9-14.7(2) Quality**

5 *Supplement this section with the following:*

6
7 Plant material shall be free from disfiguring knots, swollen grafts, sunscald injuries,
8 bark abrasions, evidence of improper pruning or other objectionable disfigurement.

9
10 Potted and container stock shall be well rooted and vigorous enough to ensure survival
11 and healthy growth. Shrubs shall have full foliage (not leggy). Container stock shall be
12 grown in its delivery container for not less than six (6) months, but not for more than
13 two (2) years. Root bound or broken containers will not be accepted. Bare root, liner
14 and root stock with dried or shriveled roots from exposure will not be accepted.

15
16 Measurements, caliper, branching, grading, quality, balling and burlapping shall follow
17 the Code of Standards of the American Associate of Nurserymen in the American
18 Standard for Nursery Stock, ANSI 260.1, latest edition. Measurements shall be taken
19 with all branches in their normal growing position. Plants shall not be pruned prior to
20 delivery to site.

21
22 **9-14.7(3) Handling & Shipping**

23 *Supplement this section with the following:*

24
25 All plant material shall be transported to planting locations with care to prevent
26 damage. Tie back branches as necessary and protect bark from chafing with burlap
27 bags. Do not drag plant materials along ground without proper protection of roots and
28 branches. Protect rootballs from environmental or mechanical damage and water as
29 necessary to keep roots moist.

30
31 **9-14.9 Decorative River Rock**

32 *Add the following new section:*

33
34 Decorative Rock shall be round river rock in color mix of grays, browns, tans and
35 blacks. Gradation of Decorative Rock shall be 50% 2-3" and 50% 4-8" with even
36 gradation across the mix.

37
38 **9-14.10 Tree Watering Bag System**

39 *Add the following new section:*

40
41 Tree watering bag system shall be commercially available, 15-gallon, slow-release
42 watering bag with two (2) water-release points per bag. Materials: UV-stabilized
43 polyethylene with nylon zipper and polypropylene handle straps; color: green.

44
45 **END OF SECTION**

9-30 WATER DISTRIBUTION MATERIALS

The first paragraph is revised to read:

This specification addresses pipe and appurtenances 24-inch in diameter and smaller. Water distribution material incorporated in the work shall be new. Prior to construction, the Contractor shall submit 3 copies of material submittals to the Engineer for approval.

9-30.1(1) Ductile Iron Pipe

This section is revised to read:

Ductile iron pipe shall be centrifugally cast and meet the requirements of AWWA C151. Ductile iron pipe shall have a cement mortar lining meeting the requirements of AWWA C104. Ductile iron pipe shall be a minimum of Special Thickness Class 52 and manufactured by the following:

- Tyton Joint:
 - McWane Cast Iron Pipe Company
 - Pacific States Cast Iron Pipe Company
 - U.S. Pipe and Foundry Company
- Fastite Joint:*
- American Cast Iron Pipe Company
- Mechanical Joint:
 - McWane Cast Iron Pipe Company
 - American Cast Iron Pipe Company
 - Pacific States Cast Iron Pipe Company
 - U.S. Pipe and Foundry Company

Nonrestrained joints shall be rubber gasket, push-on type, or mechanical type meeting the requirements of AWWA C111.

Restrained joints shall be as specified in Section 9-30.2(6).

**Note: When plans and specifications require push-on joints to be restrained with nitrile gaskets, only American Ductile Iron Pipe and Fastite Fast-Grip® restraining gaskets are allowed.*

9-30.1(3) Rubber Gaskets

This section is added with the following:

All gaskets furnished with pipe shall be styrene butadiene rubber (SBR), unless specified otherwise by the project engineer. When deemed necessary, "Nitrile" (NBR) gaskets will be required. When NBR gaskets are required they must be color-coded and/or marked in color so as to be easily identifiable as nitrile. When nitrile push-on joint restraining gaskets are required, they shall be Fastite Fast-Grip® manufactured by American Cast Iron Pipe Company or approved equal. All gaskets must conform to ANSI/AWWA C111. The gasket requirements for the specific project will be indicated on the face of the plan for the project.

9-30.2 Fittings

This section is revised to read:

Ductile iron flanges and flanged ductile iron spool pieces shall be in accordance with ANSI/AWWA C 115.

Gaskets for steel flanged joints shall be cloth inserted rubber made by Johns-Manville, JM-109 or approved equal.

Unless specified otherwise, all T-head bolts and nuts supplied for mechanical joint fittings, valves, sleeves, couplings, hydrants, tapping sleeves, etc., shall be made of high-strength, low alloy steel, conforming to ANSI/AWWA C111 (Corrosion-Resistant Steel "Cor-Ten"). All other bolts and nuts shall be hot dipped galvanized or electroplated and conform to ASTM A 307, Grade B.

All bolts shall be of sufficient length that, when assembled and tightened to proper torque, a minimum of one thread will extend outside of the nut.

Tie rods and nuts for hydrant laterals, etc., shall be made of high strength, low alloy steel conforming to ANSI/AWWA C111 ("Cor-Ten"), unless specified otherwise in the plans or Special Provisions.

All ductile iron fittings shall conform to the latest ANSI/AWWA C110 Specifications or ANSI/AWWA C153 for Mechanical Joint Compact Ductile Iron Class 350 fittings. All fittings shall have either cement-mortar lining conforming to ANSI/AWWA C104 or fusion bonded epoxy internal lining per ANSI/AWWA C153. Mechanical joint glands supplied with the above fittings shall be ductile iron in accordance with the above specifications. The mechanical joint fittings/pipe shall be installed and the bolts tightened in the sequence and to the torque specified in DIPRA published by the Ductile Iron Pipe Research Association.

9-30.2(6) Restrained Joints

This section is supplemented with the following:

Mechanical joint restraint shall be incorporated in the design of the follower gland and shall include a restraining mechanism which, when actuated, imparts multiple wedging action against the pipe, increasing its resistance as the pressure increases. Joint flexibility shall be maintained after burial. Glands shall be manufactured of ductile iron conforming to ASTM A 536-80. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee-head bolts conforming to ANSI/AWWA C111/A21.11 and ANSI/AWWA C153/A21.53. Twist-off nuts, sized same as tee-head bolts, shall be used to insure proper actuating of restraining devices. The mechanical joint restraint device shall have a working pressure of at least 250-psi with a minimum safety factor of 2:1 and shall be manufactured by:

- EBAA Iron, Inc., MEGALUG,
- Romac "RomaGrip"
- Uniflange Series 1400
- Tyler Union "TUFGrip Series 1000"
- or approved equal

Tyton joint restraint shall be made with Field-Lok 350® restraining gaskets or approved equal. Fastite joint restraint shall be made with Fast-Grip® restraining gaskets or approved equal.

9-30.2(7) Bolted, Sleeve Type Couplings for Plain End Pipe

The first two sentences in this section are revised to read:

Bolted, sleeve-type couplings, reducing couplings, or transition couplings will be mechanical style flexible coupling meeting AWWA C219, with minimum 7 inch center ring, epoxy coating, and stainless steel nuts and bolts.

End Cap Couplings will be mechanical style flexible coupling meeting AWWA C219, with minimum 7- inch center ring, epoxy coating, stainless steel nuts and bolts, and tapped 2-inch.

Couplings will be proper to type of pipe (e.g. D.I to C.I.)

9-30.3(1) Gate Valves (3 inches to 16 inches)

This section is revised to read:

The end flanges of flanged gate valves shall conform in dimensions and drilling to the Standard ANSI B16.1 for cast iron flanges and flanged fittings, Class 125 unless specifically provided otherwise in plans or supplementary specifications. The bolt holes shall straddle the vertical centerline.

All gate valves shall be resilient seat and shall comply with the ANSI/AWWA standard as listed below:

All Resilient Seat Gate Valves shall conform to the latest revision of AWWA Standard C-509/515 and be UL listed, FM approved. They shall be as manufactured by:

- American Flow "Series 2500"
- AVK-series 25 or 65
- Clow model "2638, 2639 and 2640"
- Kennedy model "KS-FW" and "KS-RW"
- M&H: Style "4067"
- M&H: Style "7000 series"
- Mueller Style "2362"
- NIBCO 619-RW Series
- US Pipe "Metroseal 250"
- East Jordan "Flowmaster"
- or approved equal

All Resilient Seat Gate Valves shall meet the following requirements:

1. Shall have the body and bonnet coated with a fusion bonded epoxy coating meeting all the application and performance requirements of AWWA C-550.
2. All gate valve ends shall be as shown on the project drawing and conform to the applicable ANSI/AWWA standard. Flanged ends shall conform to ANSI

B16.1 class 125 or C110 A21.10. Mechanical joint and push-on joint must conform to ANSI/AWWA C111, A21.11.

3. All gate valves, 16-inch and larger, shall be horizontal stem, equipped with machine cut cast steel gears, extended type grease case, and bypass, all in accordance with AWWA Standard C509/515.
4. All bonnet and packing nuts and bolts shall be stainless steel.

9.30.3(3) Butterfly Valves

This section is revised with the following:

All butterfly valves shall conform to ANSI/AWWA C504 for Rubber Seated Butterfly Valves, Class 150B. All nuts and bolts shall be stainless steel.

All butterfly valves shall be manufactured by:

- Henry Pratt "Groundhog"
- M&H/Clow "4500"
- Mueller "Lineseal III"
- Or approved equal

9.30.3(4) Valve Boxes

This section is revised to read:

Cast iron valve boxes and lids shall be as indicated on the attached Tacoma Water Drawing No. 17-56-1. All buried valves shall be provided with a valve box and lid with an extension of cast iron soil pipe as necessary. The Contractor shall maintain the location and provide access to all valves within the project. No valve shall remain buried during construction.

9.30.3(8) Tapping Sleeve and Valve Assembly

The fourth sentence is revised to read:

Valves specifically designed for tapping meeting the requirement of AWWA C500, and valves meeting the requirements of AWWA C509/C515 will be permitted. All nuts and bolts shall be stainless steel.

The sixth sentence is revised to read:

Tapping sleeves shall be ductile iron, mechanical joint type or the fabricated steel type, whichever is specified in the bid proposal.

This section is supplemented with the following:

The fabricated steel sleeves shall have epoxy coating and stainless steel bolts and shall be:

- Model JCM 412 manufactured by JCM Industries*
- Model JCM 414 manufactured by JCM Industries
- Model FTS 420 manufactured by Romac Industries, Inc.*
- SST III manufactured by Romac Industries, Inc.
- Smith Blair Style 623
- or approved equal

*Models JCM 412 and FTS 420 will only be allowed when tapping ductile iron pipe and the size of the tap is **less than half** of the size of the pipe being tapped.

Ductile iron, mechanical joint sleeves shall be:

- Model H-615 manufactured by Mueller Co.
- Model H-619 manufactured by Mueller Co.
- or approved equal.

9-30.5 Hydrants

This section is revised to read:

Fire hydrants furnished under these Specifications shall conform to the ANSI/AWWA C502, Specifications for Dry-Barrel Fire Hydrants, with the following limitations and exceptions, and be installed per Tacoma Water Drawing 17-56-1.

- a. **Drawings** - Drawings of adequate size showing principal dimensions, material and finish shall be furnished with the bid for fire hydrants not listed below as acceptable.
- b. **Make** –
 - Clow "Medallion"
 - Kennedy "Guardian K81D"
 - M&H 129 S
 - Mueller "Super Centurion 250"
 - U.S. Pipe "M-94"
 - Waterous "Pacer/WB67-250, Tacoma"
- c. **Capacity** - Standard size - two-hose and one-pumper nozzle.
- d. **Size** - Standard size shall be 5-1/4-inch main valve with 6-inch inlet bell. All hose nozzles shall be 2-1/2 inches. Unless otherwise indicated in the special Provisions and/or the Drawings, all pumper nozzles and quick connect fittings shall be as specified on standard drawing 17-56-1.
- e. **Length** - Contractor shall verify proper depth of bury of fire hydrant prior to installation.
- f. **Hydrant Inlet** - All hydrants shall be provided with mechanical joint inlet.
- g. **Operating Mechanism** - All moving contact surfaces shall be bronze on bronze or bronze on iron or steel as may be approved by the Superintendent. The hydrants shall have the main valve seat threaded into a bronze sub-seat in the shoe of the hydrant to permit easy removal of the main valve seat. The bronze sub seat shall be; threaded into the shoe of the fire hydrant, or the sub seat shall be attached to the shoe of the fire hydrant independently from the barrel to shoe connection.
- h. **Direction of Opening** - All hydrants shall open by turning the operating nut to the left (counter-clockwise).
- i. **Hydrant Barrels** - All hydrant barrels shall have a flange located at least 2 inches above the finished grade line and flanged extension sections shall be available in increments of 6 inches.
- j. **Operating Nuts for Stem and Nozzle Caps** - The operating stem and cap nut shall be pentagonal in shape. The pentagon shall measure 1.35 inches from the point to the flat, at the base of the nut and 1.23 inches at

the top. The faces shall be tapered uniformly and the height of the nut shall not be less than 1.0 inches. The point to the flat dimension shall be measured to the theoretical point where the faces would intersect were there no rounding off of the corners. All nozzles shall be fitted with cast iron threaded caps with operating nut of the same design and proportions as the stem nut. Caps shall be threaded to fit the corresponding nozzles and shall be fitted with suitable gaskets for positive water tightness.

k. **Fire Hydrant Quick Connect Coupling** – The fire hydrant quick Connect Coupling (aka Storz Coupling) shall be in compliance with the latest version of “NFPA 1963, for non-threaded Metal-Faced Hydrant Connections”. The size of the Quick Connect Coupling and hydrant pumper nozzle threads will be as shown on standard drawing 17-56-1.

l. **Nuts and Bolts**- All nuts and bolts below ground level shall be stainless steel.

9-30.5(2) Hydrant Dimensions

This section is replaced with the following table:

Hydrant connection D.I. Pipe ins. dia.	6-inch
Standard, minimum dia.	6-7/8 inch
Length of 4.5 ft. bury, hydrant from bottom of hydrant connection to sidewalk ring.	4 feet, 8 inches
Valve opening minimum dia.	5-1/4 inches
Hose Nozzles-number and size	2 - 2-1/2-inch
Thread (Nat. Board Fire Underwriters)	7-1/2 per inch
Outside dia. Finished	3-1/16 inch
Dia. at root of thread	2.8715 inch
Pattern of thread	60° V thread
Total length of threaded male Nipple	1-inch
Pumper Nozzles-number and size	1 - 4-inch
Thread, outside dia. finished (with .02" cut off top)	5.09-inch
Dia. at root of thread (with .02" left in valley)	4.74-inch
Threads (Tacoma Std.)	4 per inch
Pattern of thread-modified	60° V thread
Total length of threaded male nipple	1-1/8-inch

9-30.5(3) Hydrant Extensions

This section is revised to read:

No hydrant barrel extensions are approved on new installations

9-30.6 Water Service Connections

This section does not apply to the contract.

END OF SECTION

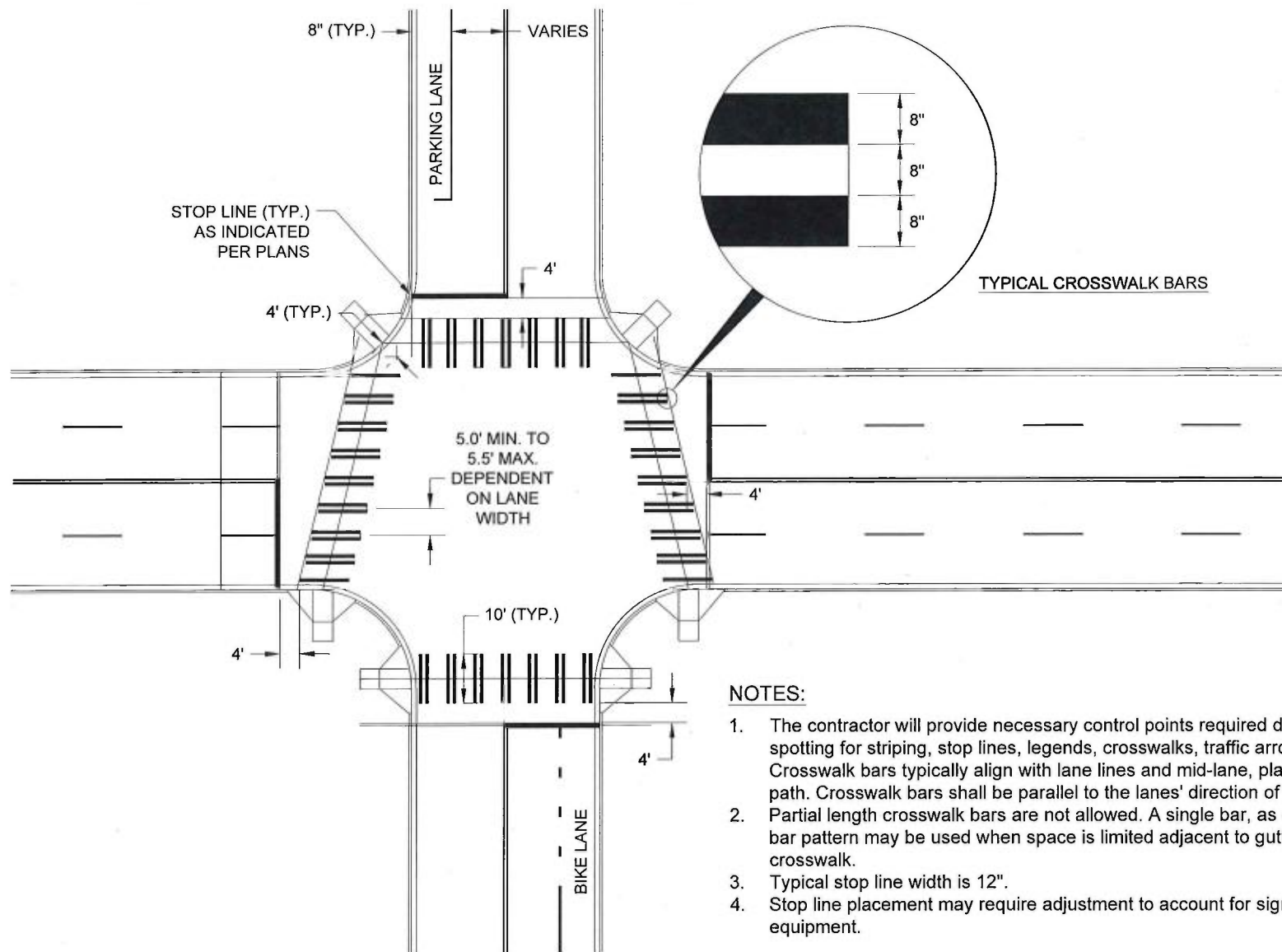
END OF SPECIAL PROVISIONS

APPENDIX A

CITY OF TACOMA

AND

WSDOT STANDARD PLANS



NOTES:

1. The contractor will provide necessary control points required during preliminary spotting for striping, stop lines, legends, crosswalks, traffic arrows, and signs. Crosswalk bars typically align with lane lines and mid-lane, placed to avoid wheel path. Crosswalk bars shall be parallel to the lanes' direction of travel.
2. Partial length crosswalk bars are not allowed. A single bar, as opposed to the double bar pattern may be used when space is limited adjacent to gutter, curb or intersecting crosswalk.
3. Typical stop line width is 12".
4. Stop line placement may require adjustment to account for signal detection equipment.

DCS

PUBLIC WORKS

NA

TACOMA POWER

REVIEWED BY

GMS

ENVIRONMENTAL
SERVICES

NA

TACOMA WATER



APPROVED FOR PUBLICATION

[Signature] 8/16/16

CITY ENGINEER

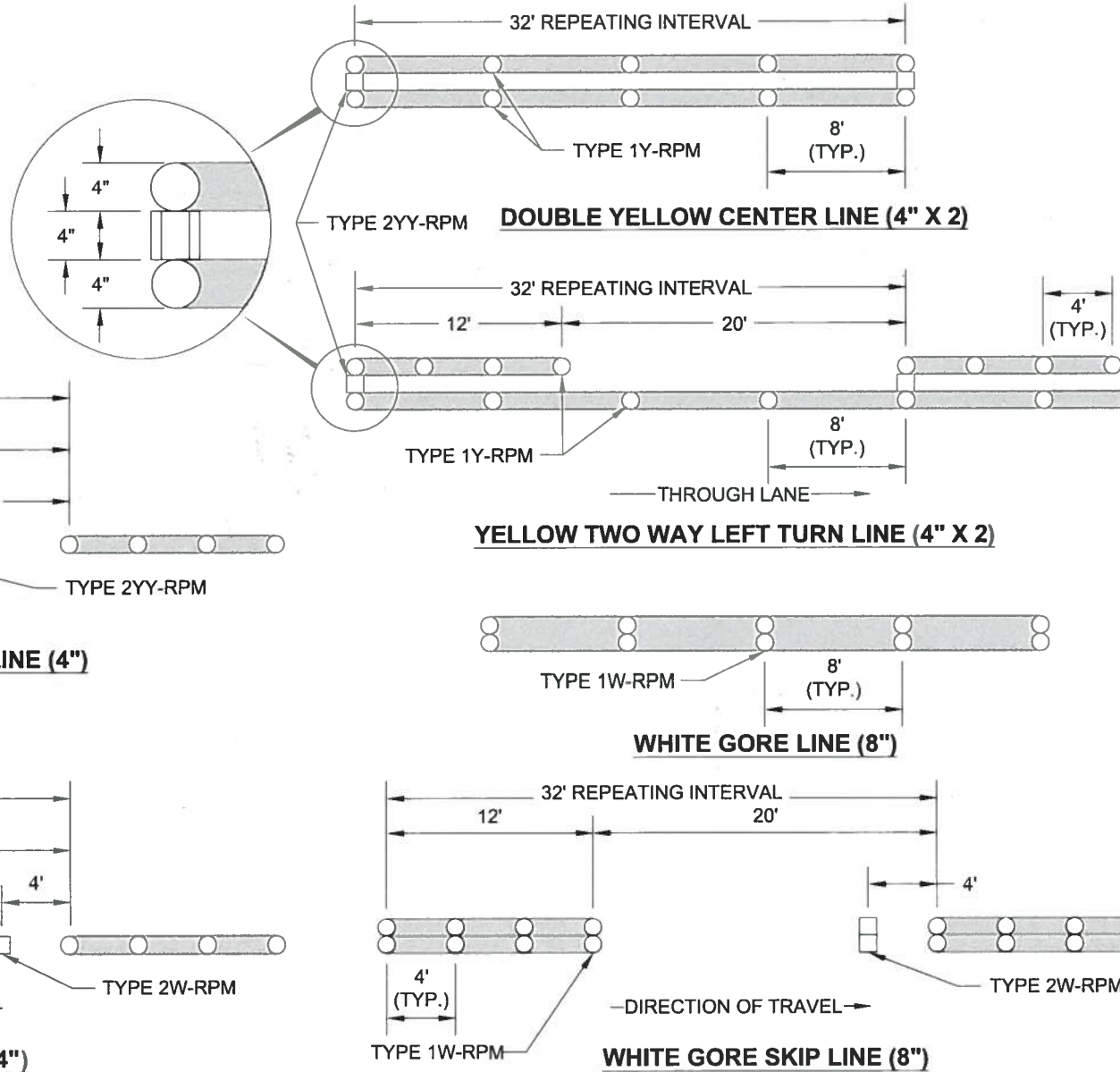
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CITY OF TACOMA
TYPICAL CROSSWALK AND
STOP LINE LAYOUT FOR
VARIOUS CURB RAMP COMBINATIONS

STANDARD PLAN NO. CH-02

NOTES:

1. The Contractor will provide necessary control points for striping, stop lines, legends, crosswalks, traffic arrows, and signs. City inspection required before striping or associated sign installation begins.
2. Use of RPMs as shown correspond with paint striping. If striping consists of thermoplastic (or similar) then Type 1Y/W-RPMs are omitted.
3. RPMs shall not be placed over longitudinal or transverse joints of the pavement surface.



DCS

PUBLIC WORKS

NA

TACOMA POWER

REVIEWED BY

ENVIRONMENTAL
SERVICES

TACOMA WATER



APPROVED FOR PUBLICATION

CITY ENGINEER

DATE

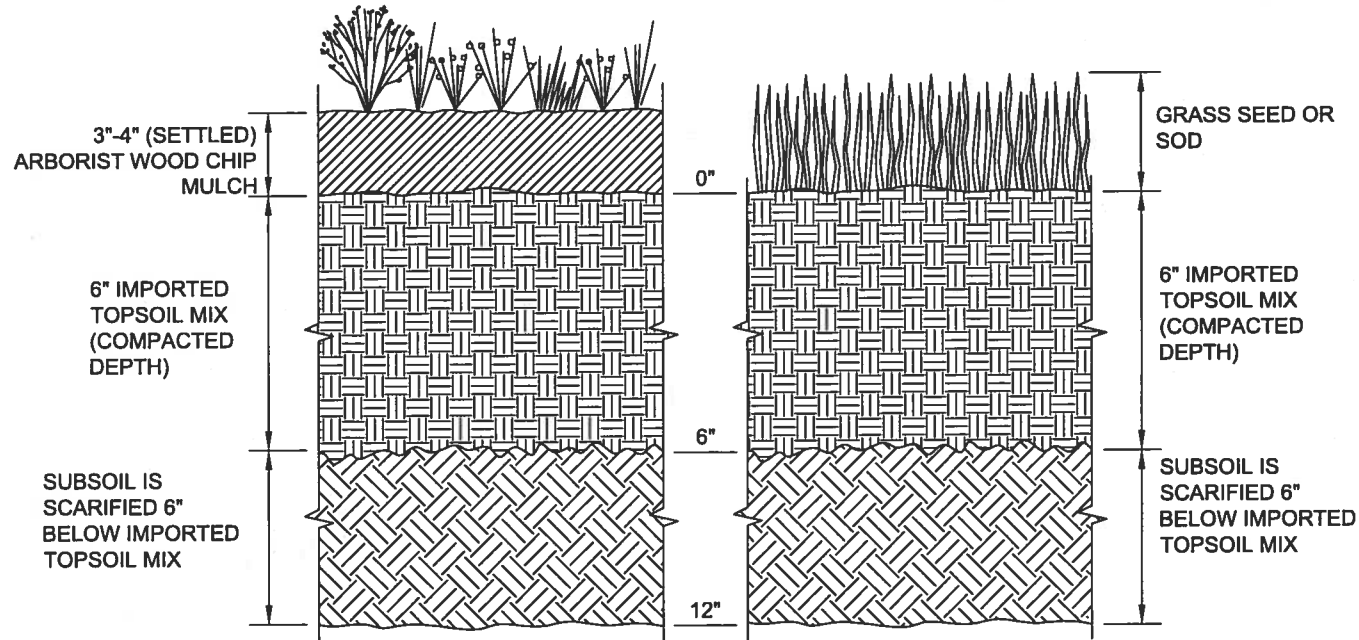
CITY OF TACOMA

LONGITUDINAL
PAVEMENT MARKINGS

STANDARD PLAN NO. CH-03A

PLANTING BEDS

TURF (LAWN) AREAS



OPTION 4: Import topsoil mix of sufficient organic content and depth to meet the requirements. All soil areas disturbed or compacted during construction, and not covered by buildings or pavement, shall be restored as described below.

Scarification: scarify or till subgrade in two direction to 6 inches depth. Entire surface shall be disturbed by scarification. Do not scarify within drip line of existing trees to be retained.

A. Planting Beds

Use imported topsoil mix containing 10% organic matter (typically around 40% compost). Soil portion must be sand or sandy loam as defined by the USDA. Place 3 inches of imported topsoil mix on surface and till into 2 inches of soil. Place 3 inches of imported topsoil mix on surface and till into 2 inches of soil. Place second lift of 3 inches topsoil mix on surface.

Rake beds to smooth and remove surface rocks larger than 2 inches diameter. Mulch planting beds with 3" - 4" of organic mulch or stockpiled duff.

B. Turf (Lawn) Areas

Use imported topsoil mix containing 5% organic matter (typically around 25% compost). Soil portion must be sand or sandy loam as defined by the USDA. Place 3 inches of imported topsoil mix on surface and till into 2 inches of soil. Place second lift of 3 inches topsoil mix on surface.

Water or roll to compact to 85% of maximum dry density. Rake to level and remove surface rocks larger than 1 inch diameter.

Setbacks: to prevent uneven settling, do not compost-amend soils within 3 feet on center of utility infrastructure (poles, vaults, meters etc.). Within one foot of pavement edge, curbs and sidewalks; soil should be compacted to approximately 90% max. modified proctor density (ASTM D1557) to ensure a firm surface. Do not compact within tree protection zone. See Std. Plans LS-08 and LS-09.

See SWMM BMP L613 for additional information.

DCS

PUBLIC WORKS

NA

TACOMA POWER

REVIEWED BY

ENVIRONMENTAL
SERVICES

NA

TACOMA WATER

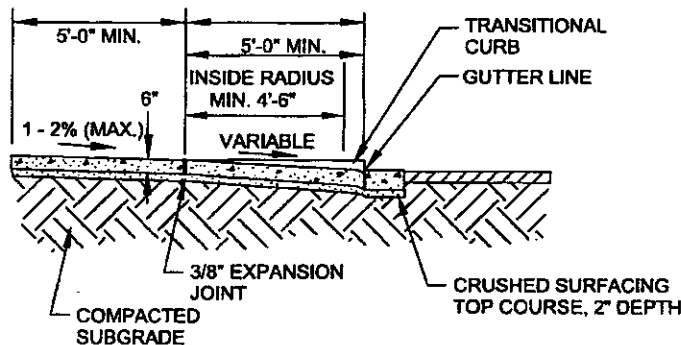
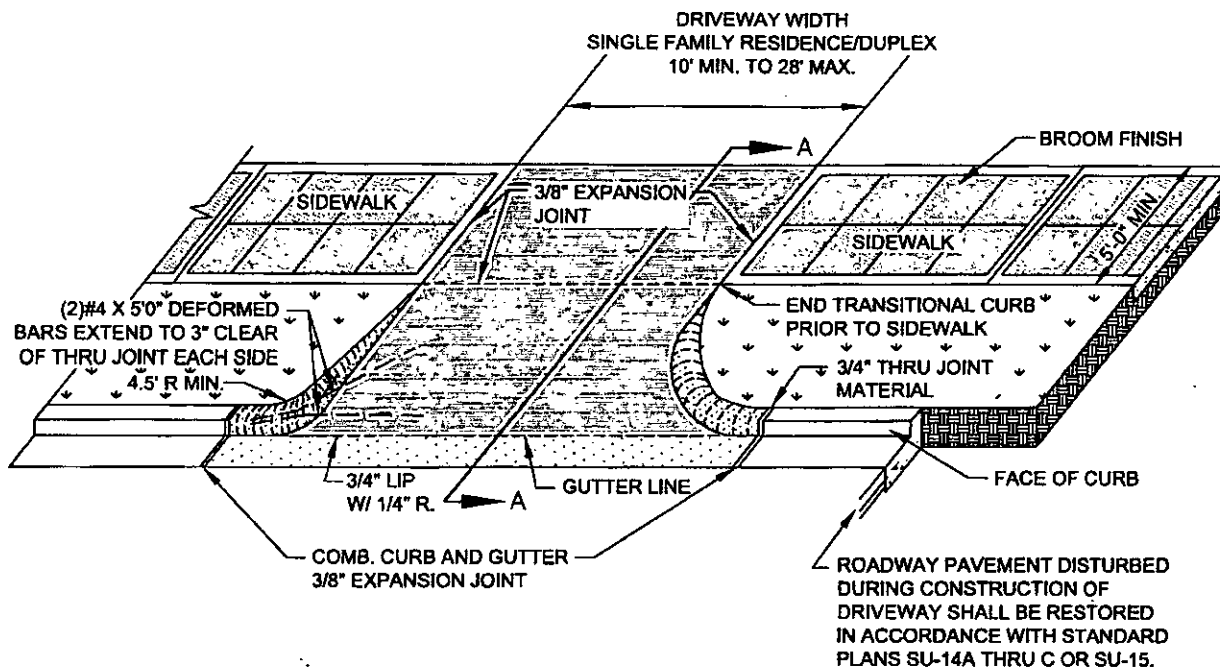


APPROVED FOR PUBLICATION

CITY ENGINEER

DATE

CITY OF TACOMA
BMP L613 POST CONSTRUCTION SOIL
QUALITY AND DEPTH
OPTION 4 - IMPORTED TOPSOIL
STANDARD PLAN NO. GSI-01d



SECTION DETAIL A-A

NOTES:

1. All driveways shall be approved by the Tacoma Landmark Preservation Commission.
2. Concrete shall be a minimum of Class 3000.
3. All joints shall be cleaned & edged. External joints to the driveway shall be 1/2" radius. Internal joints to the driveway shall be 1/4" radius.
4. Driveways wider or narrower than shown on this plan require approval of the Director of Public Works.
5. 6" thick driveway section shall be a brushed finish in a transverse direction to the center line of the driveway.
6. Driveways wider than 20' require a center line expansion joint.
7. All expansion joints shall be full depth with 3/8" premolded joint filler.
8. When trenching through a driveway, replacements for driveways greater than 20' in width shall include a minimum 3' wide cut back over undisturbed soil and extend to the nearest control joint. Replacements for driveways 20' or less in width will require a full driveway replacement.
9. All joints shall be saw cut full depth prior to restoration and 3/8" expansion joint installed. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.
10. Where distance from face of curb to front face of walk exceeds 12', a transverse joint shall be placed at the radius point or as directed by the engineer.
11. Driveways shall be placed before roadway restoration pavement.
12. Apply lamp black 1lb. per cubic yard of cement concrete or as required for desired discoloration in accordance with ASTM D209-81 standard specification for lamp black pigment.

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

CITY ENGINEER

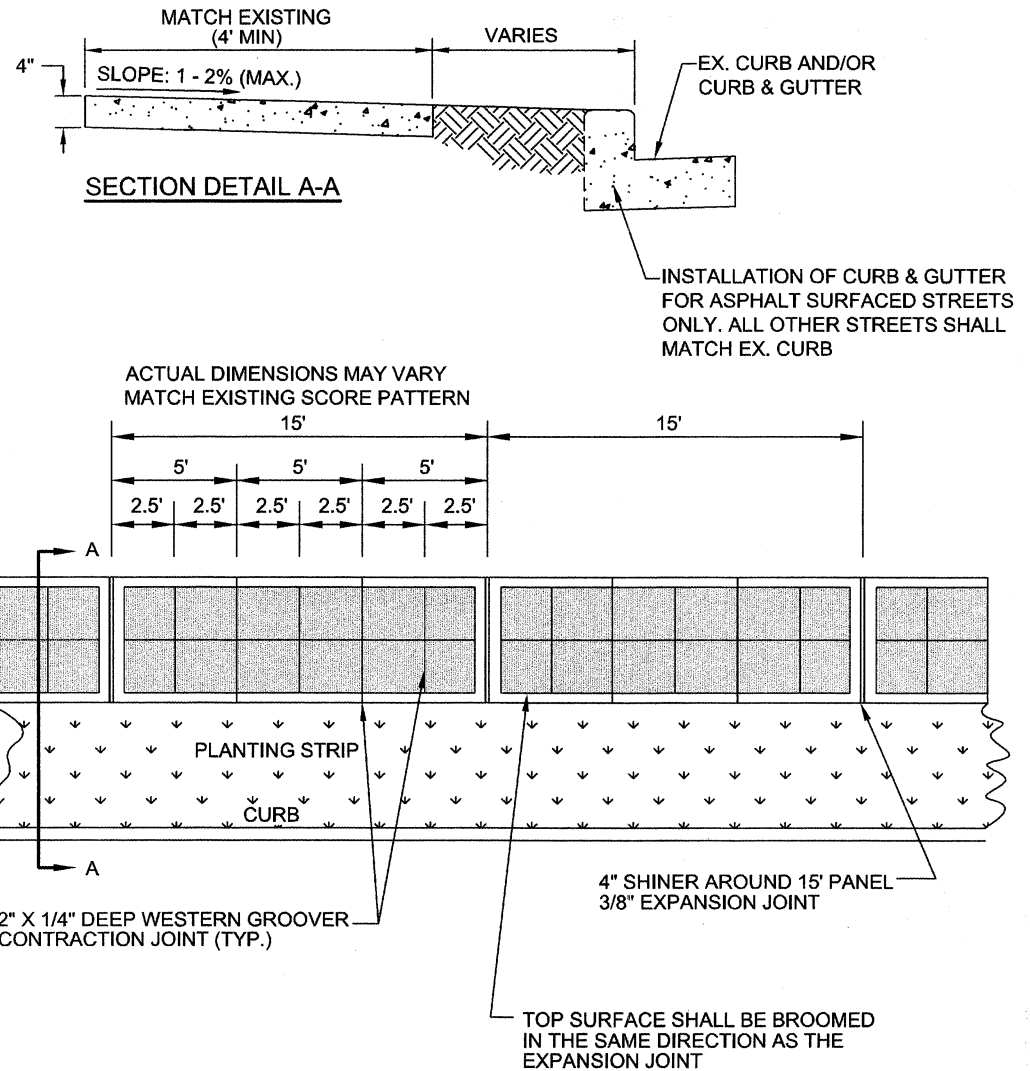
DATE

NORTH SLOPE HISTORIC DISTRICT
DRIVEWAY ENTRANCE DETAIL

STANDARD PLAN NO. HD-NS02

NOTES:

1. Sidewalks shall be designed and constructed in accordance with ADA Standards for Accessible Design, 28 CFR, Part 35 and as supplemented by the Public Right of Way Accessibility Guidelines (PROWAG).
2. Staking is required where no curb is present.
3. All expansion joints shall be full depth with 3/8" premolded joint filler.
4. All joints shall be cleaned and edged. External edges shall be 1/2" radius. Internal joints shall be 1/4" radius.
5. All soft and yielding foundation material shall be removed and replaced with crushed surfacing top course (CSTC) meeting the requirement of Section 9-03.9(3) of the WSDOT Standard Specifications.
6. All sidewalk shall be replaced to the nearest expansion or contraction joint. All joints shall be saw cut full depth prior to restoration and 3/8" expansion joint installed. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.
7. Apply lamp black 1lb. per cubic yard of cement concrete or as required for desired discoloration in accordance with ASTM D209-81 standard specification for lamp black pigment.



**CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS**

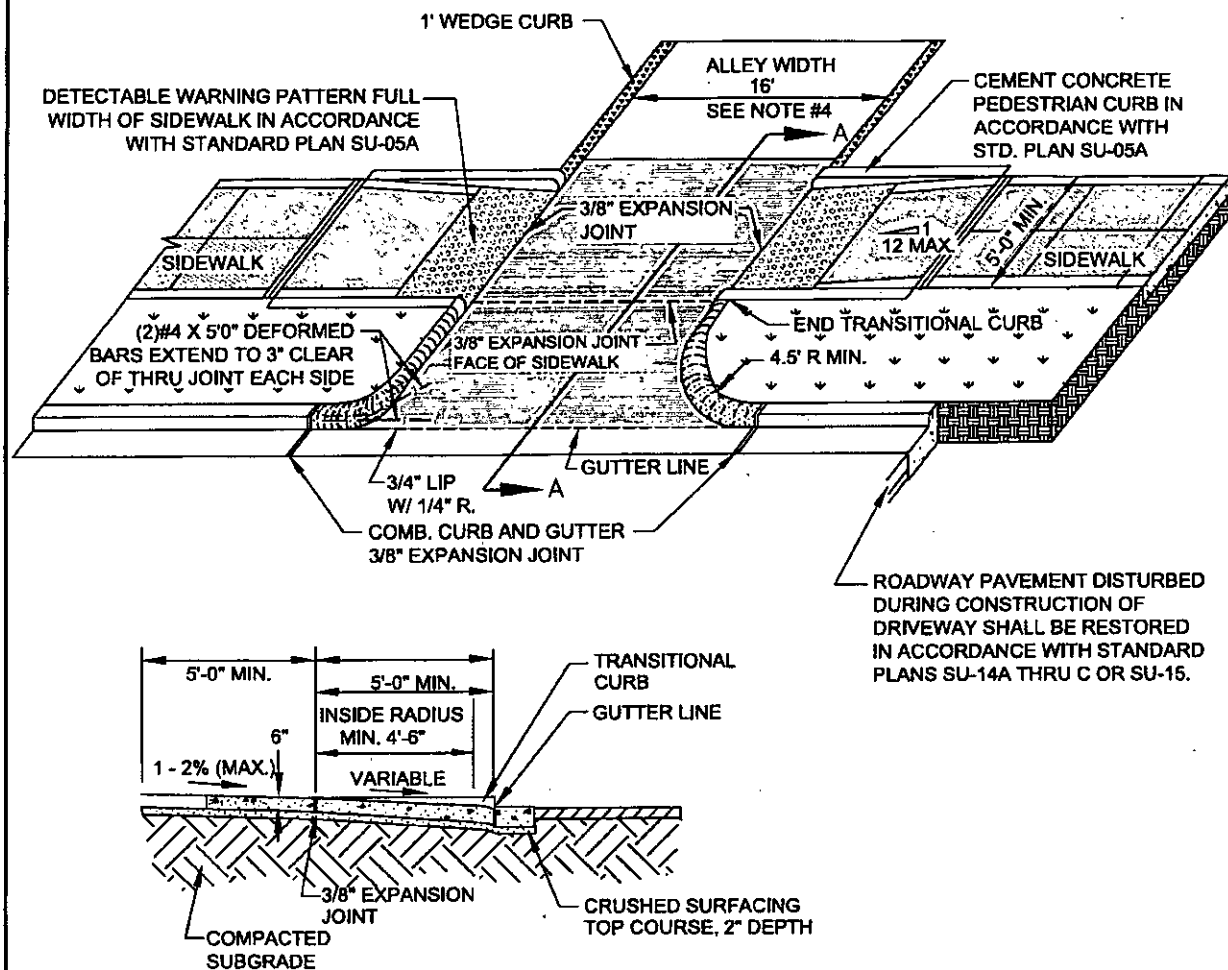
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[Signature]
CITY ENGINEER

12/6/10
DATE

**NORTH SLOPE HISTORIC DISTRICT
CEMENT CONCRETE
SIDEWALK**

STANDARD PLAN NO. HD-NS03



SECTION DETAIL A-A

NOTE:

TYPE 3 DRIVEWAY SHALL BE USED AT ALLEYS WHERE THE PLANTING STRIP IS 5' WIDE OR GREATER

NOTES:

1. All driveways shall be approved by the Tacoma Landmark Preservation Commission.
2. Concrete shall be a minimum of Class 3000.
3. All joints shall be cleaned & edged. External joints to the driveway shall be 1/2" radius. Internal joints to the driveway shall be 1/4" radius.
4. Driveways wider or narrower than shown on this plan require approval of the Director of Public Works.
5. 6" thick driveway section shall be a brushed finish in a transverse direction to the center line of the driveway.
6. Driveways wider than 20' require a center line expansion joint.
7. All expansion joints shall be full depth with 3/8" premolded joint filler.
8. When trenching through a driveway, replacements for driveways greater than 20' in width shall include a minimum 3' wide cut back over undisturbed soil and extend to the nearest control joint. Replacements for driveways 20' or less in width will require a full driveway replacement.
9. All joints shall be saw cut full depth prior to restoration and 3/8" expansion joint installed. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.
10. Where distance from face of curb to front face of walk exceeds 12', a transverse joint shall be placed at the radius point or as directed by the engineer.
11. Driveways shall be placed before roadway restoration pavement.
12. Apply lamp black 1lb. per cubic yard of cement concrete or as required for desired discoloration in accordance with ASTM D209-81 standard specification for lamp black pigment.

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

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CITY ENGINEER

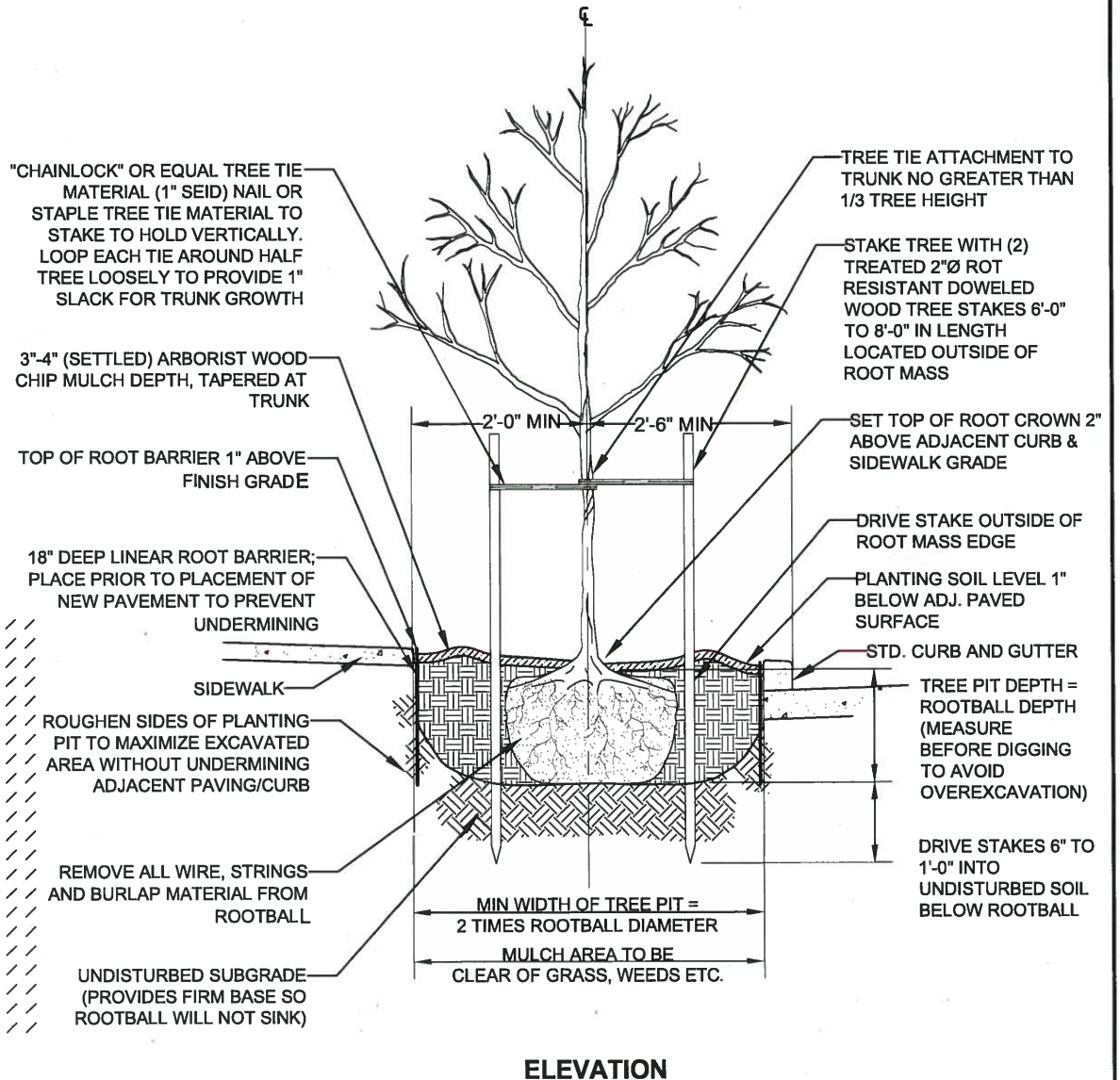
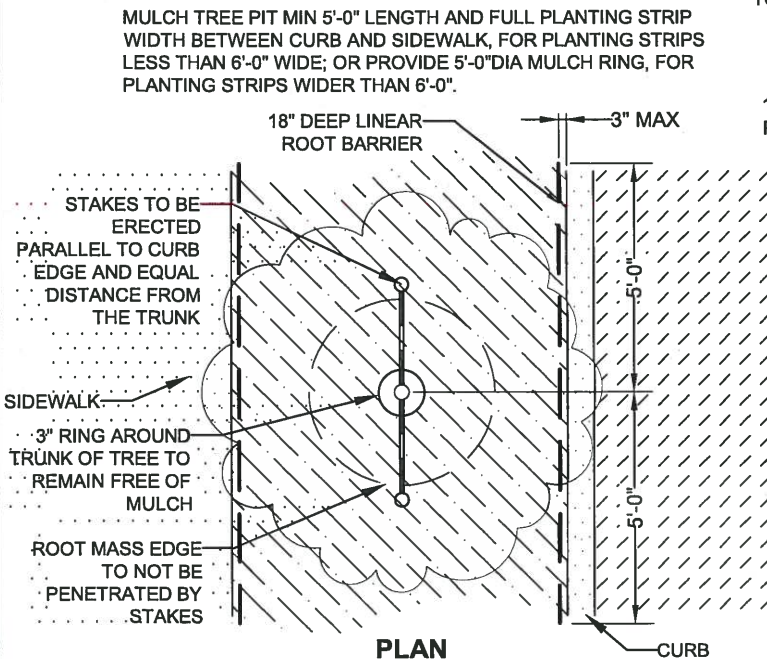
DATE

NORTH SLOPE HISTORIC DISTRICT
ALLEY ENTRANCE

STANDARD PLAN NO. HD-NS04

NOTES:

1. Planting includes removal of stakes one year after installation.
2. Shape soil surface to provide 4' dia watering ring.
3. Tree clearance shall be per STD PLAN LS-02.
4. See STD PLAN LS-03 for tree well dimension detail.
5. Root barriers shall be an injection molded or extruded modular component made of high density polypropylene or polyethylene plastic. 18" depth x 10' length root barrier is required along edge of roadways, curbs, driveways, trails, sidewalks, or other structures where root ball is within 4 feet. install root barrier for newly planted trees only.



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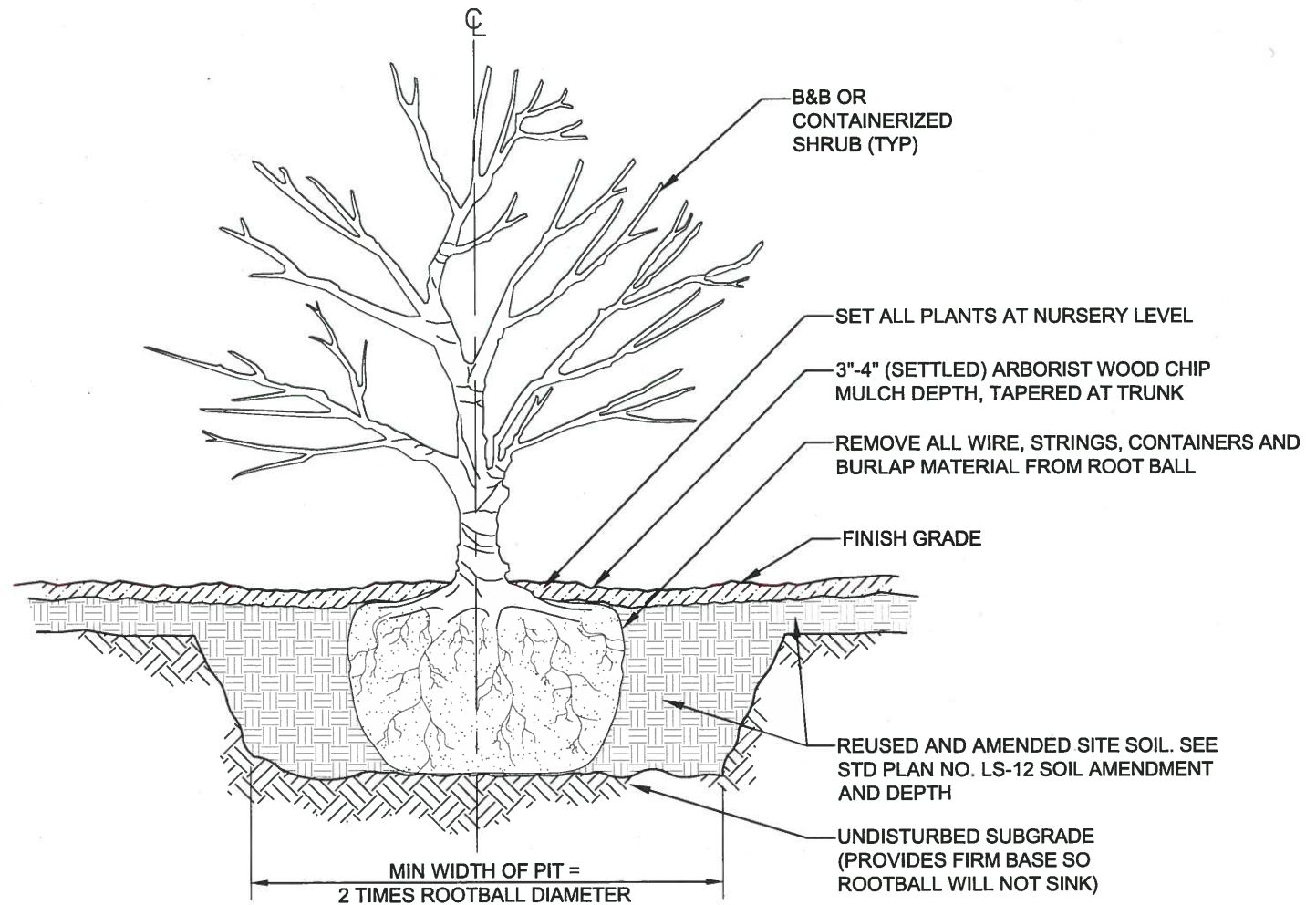
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CITY ENGINEER

DATE

STREET TREE PLANTING

STANDARD PLAN NO. LS-01



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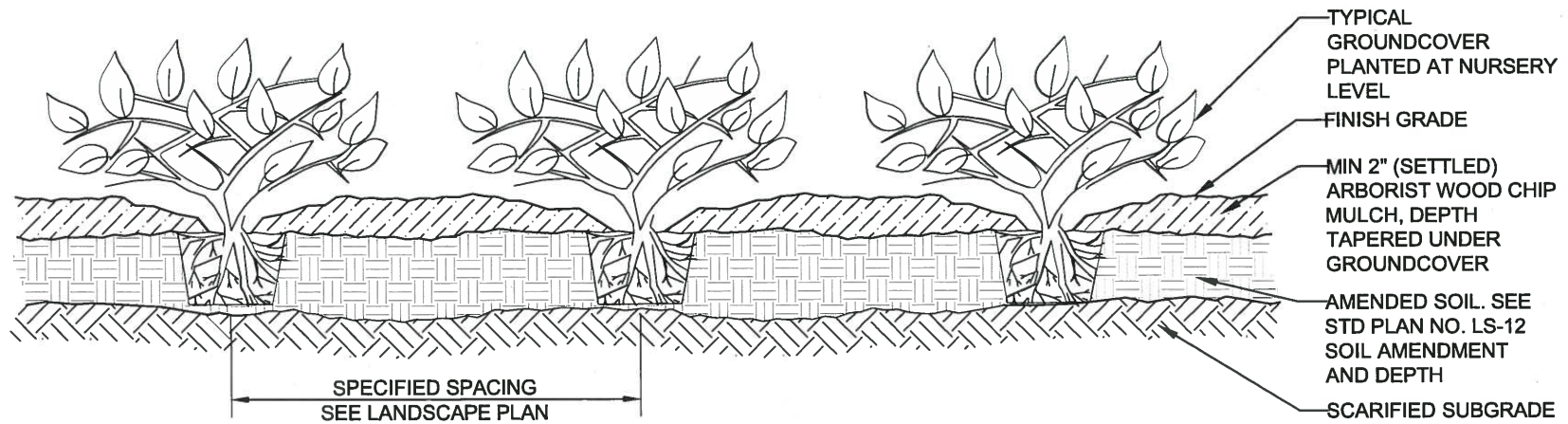
CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

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CITY ENGINEER

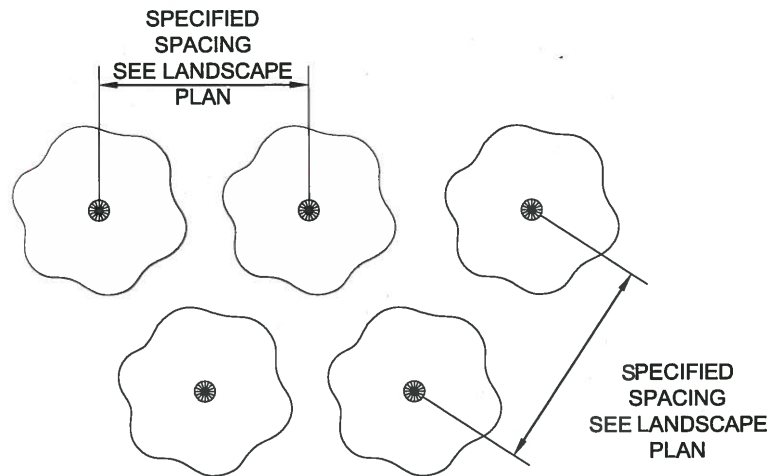
5/6/15
DATE

SHRUB PLANTING

STANDARD PLAN NO. LS-05



ELEVATION



PLAN

PLANT SPACING (INCHES)	PLANTS NEEDED TO FILL 100 SF
6	460
8	260
10	167
12	115
18	51
24	29
30	19
36	13
48	7

TYPICAL PLANT QUANTITY NEEDED TO FILL 100 SF

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

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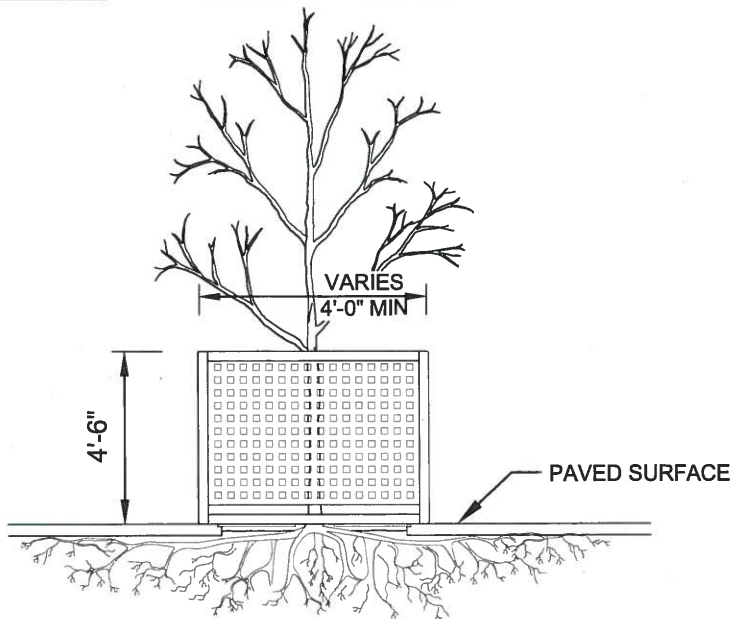
CITY ENGINEER

DATE

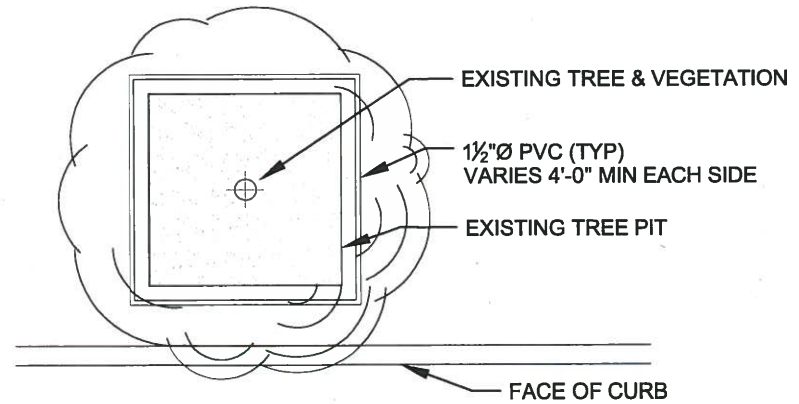
GROUNDCOVER PLANTING

STANDARD PLAN NO.

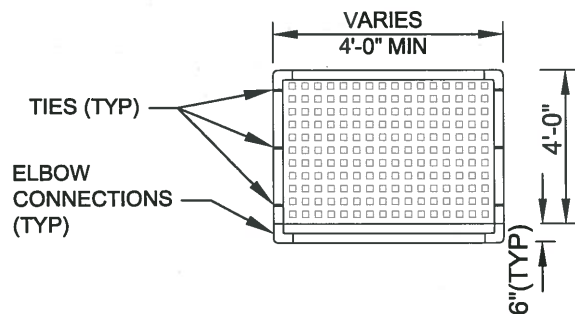
LS-06



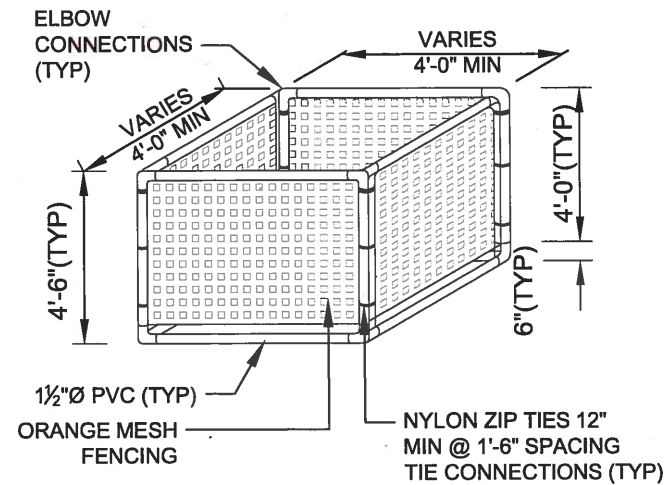
TYPICAL TREE GUARD RAIL



PLAN VIEW



TYPICAL PANEL



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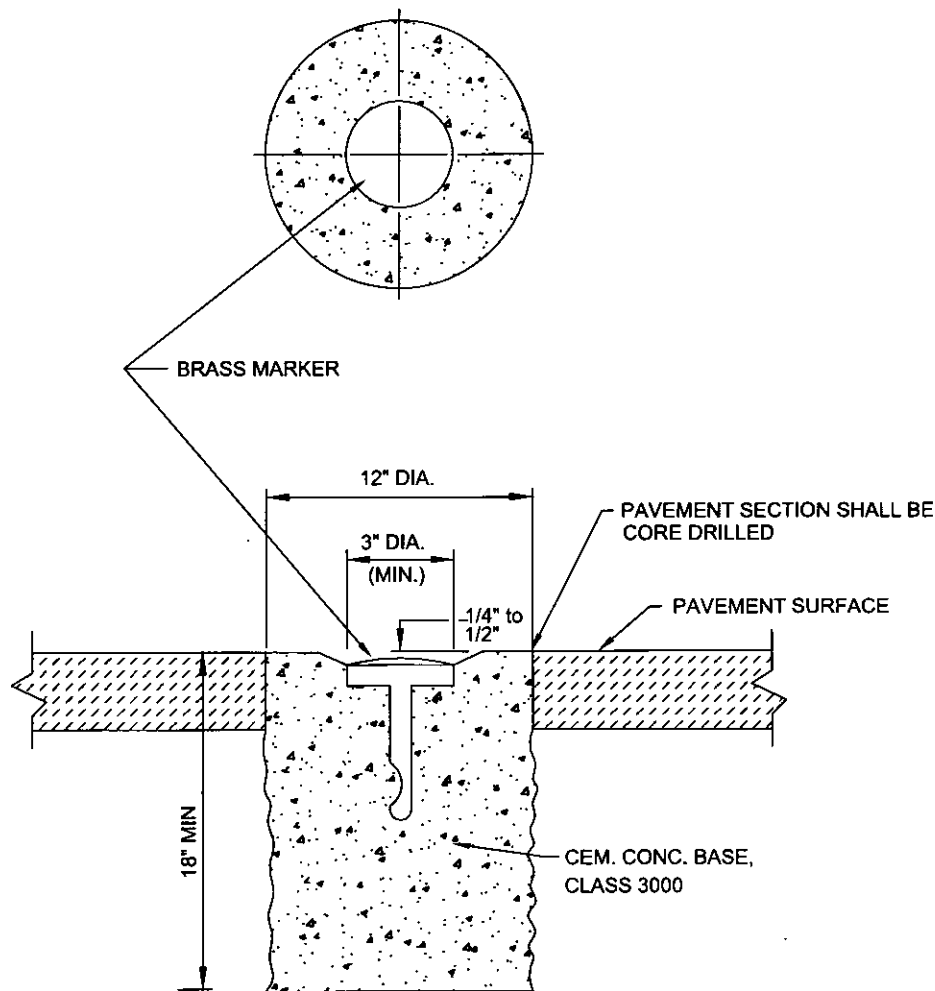
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DEPARTMENT OF PUBLIC WORKS

CITY ENGINEER

DATE

REUSABLE TREE PROTECTION
FENCING FOR PAVED AREAS

STANDARD PLAN NO. LS-11



NOTES:

1. Concrete base shall be poured in place. Hand mixed concrete is prohibited. Concrete base need not be formed.
2. Notice to surveyors: any monument set in the City of Tacoma must bear the land surveyor number of the surveyor setting the monument. Monuments set as part of an approved plat are exempt.
3. The surveyor is to supply the City of Tacoma with a copy of the calculations used to determine all monument positions before the monuments are set.
4. Brass marker for City of Tacoma funded projects will be supplied by the City, all other brass markers to be supplied by the contractor.
5. Monument must be magnetically locatable.
6. Prior to removing or destroying a monument, the surveyor or engineer shall apply for a permit from the Department of Natural Resources in accordance with WAC 332-120.

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CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

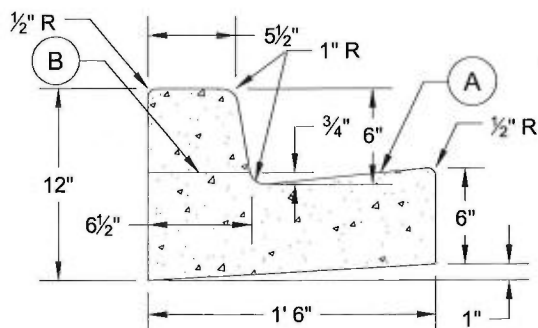
James Parney 09 JUN 2009
CITY ENGINEER DATE

POURED MONUMENT

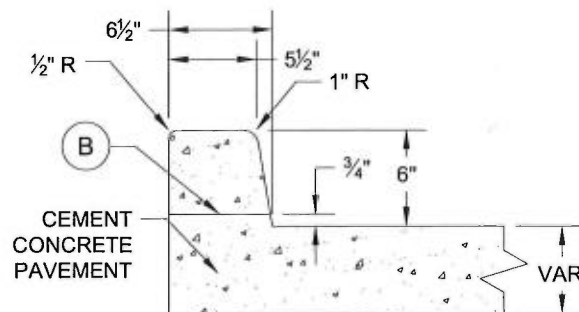
STANDARD PLAN NO. SU-01

A When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The height of the curb shall be 6", unless otherwise shown on plans.

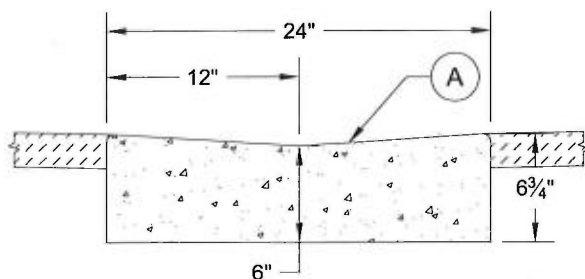
- (B) Flush with gutter pan at curb ramp entrance or $\frac{3}{4}$ " vertical lip at driveway entrance.



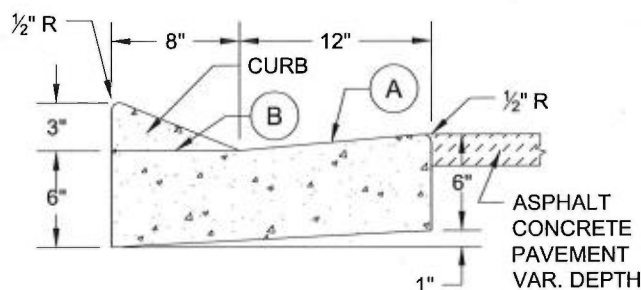
CEMENT CONCRETE TRAFFIC
CURB & GUTTER



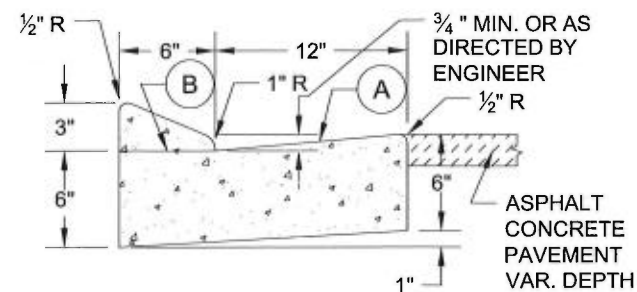
INTEGRAL CEMENT CONCRETE TRAFFIC CURB



CEMENT CONCRETE VALLEY GUTTER



TYPE "C" MOUNTABLE
CEMENT CONCRETE CURB & GUTTER



TYPE "D" MOUNTABLE
CEMENT CONCRETE CURB & GUTTER

1. For trench crossings, curb and gutter shall be removed to a minimum 2' cut back over undisturbed soil.
2. In all projects, any remaining sections of curb and gutter less than 5' in length between the project area and the nearest control joint shall also be removed and replaced.
3. All joints shall be saw cut full depth prior to restoration and $\frac{3}{8}$ " expansion joint installed.
4. Concrete finish shall match existing.
5. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.
6. Foundations shall be fully compacted prior to form placement.
7. Unsuitable foundation shall be replaced with $\frac{5}{8}$ " crushed surfacing top course.

DCS

PUBLIC WORKS

NA

TACOMA POWER

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GMS

ENVIRONMENTAL SERVICES

NA

TACOMA WATER



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[Signature] 8/16/14

CITY ENGINEER

DATE _____

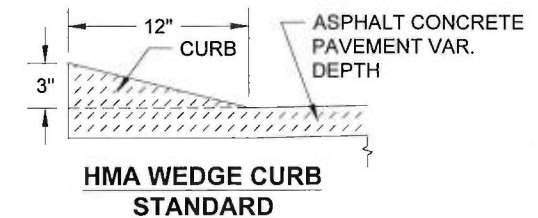
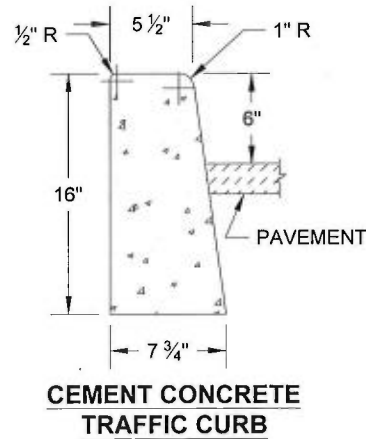
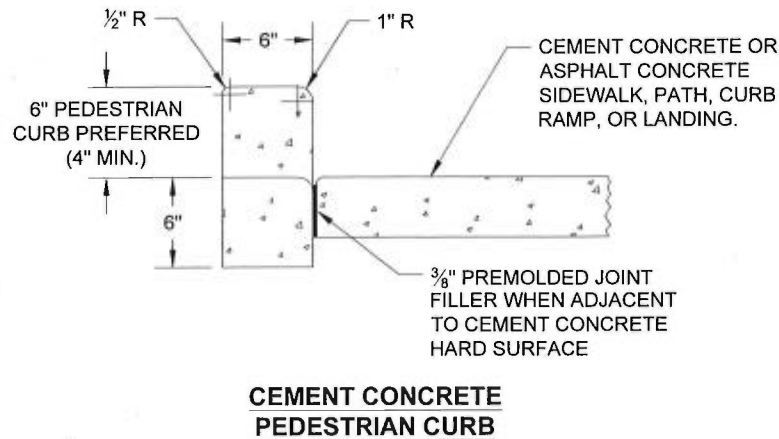
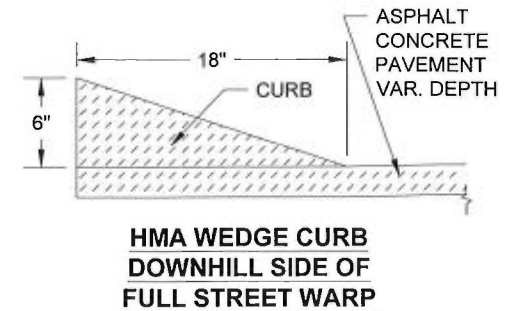
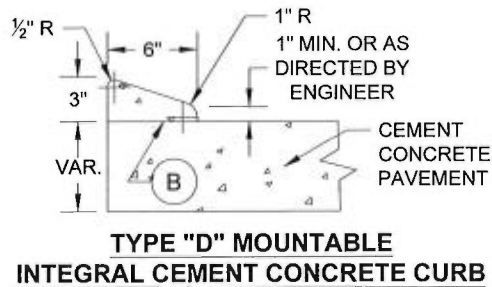
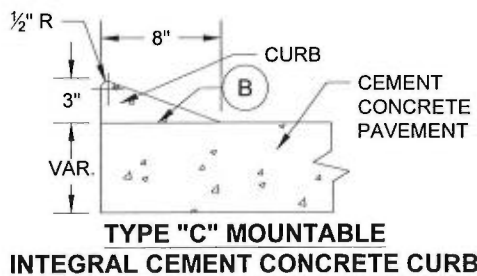
CITY OF TACOMA

CEMENT CONCRETE CURB AND GUTTER

STANDARD PLAN NO. SU-03

NOTE:

- (B) Flush with gutter pan at curb ramp entrance or $\frac{3}{4}$ " vertical lip at driveway entrance.



NOTES:

1. For trench crossings, curb and gutter shall be removed to a minimum 2' cut back over undisturbed soil.
2. In all projects, any remaining sections of curb and gutter less than 5' in length between the project area and the nearest control joint shall also be removed and replaced.
3. All joints shall be saw cut full depth prior to restoration and $\frac{3}{8}$ " expansion joint installed.
4. Concrete finish shall match existing.
5. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.
6. Foundations shall be fully compacted prior to form placement.
7. Unsuitable foundation shall be replaced with $\frac{5}{8}$ " crushed surfacing top course.

DCS

PUBLIC WORKS

NA

TACOMA POWER

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ENVIRONMENTAL
SERVICES

NA

TACOMA WATER



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CITY ENGINEER

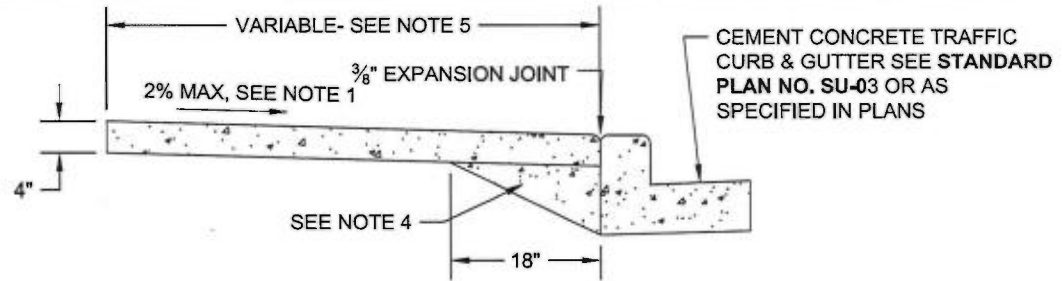
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CITY OF TACOMA
CEMENT CONCRETE
CURB AND GUTTER AND
ASPHALT WEDGE CURB

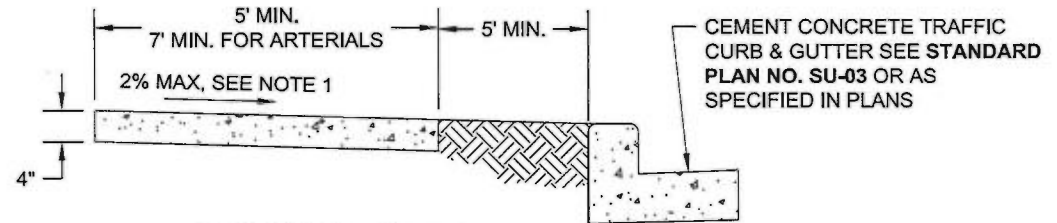
STANDARD PLAN NO. SU-03A

NOTES:

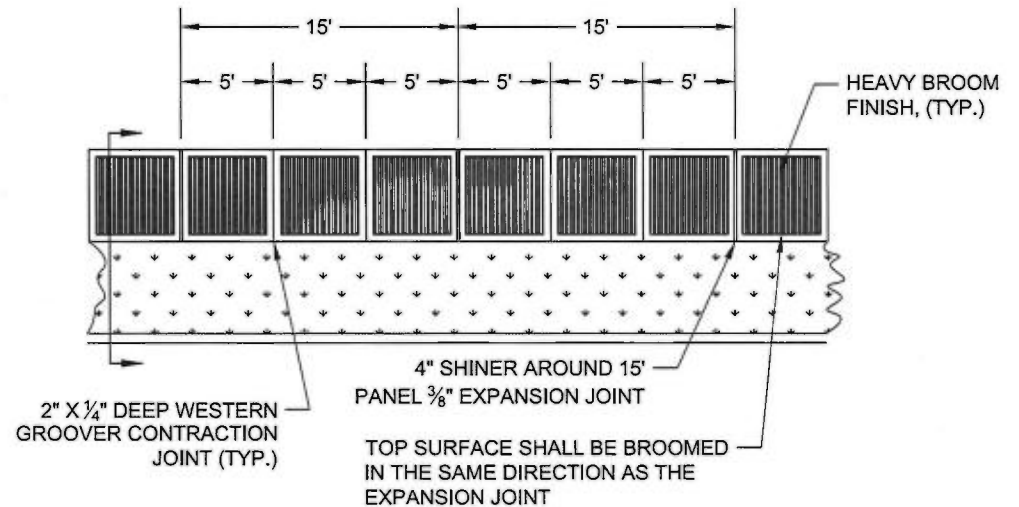
1. Sidewalks shall be designed and constructed in accordance with 2010 ADA Standards, 28 CFR, Part 35 and as supplemented by the Public Right of Way Accessibility Guidelines (PROWAG). City of Tacoma prefers sidewalk cross slopes to be designed to a maximum of 1.5% and a minimum of 1.0%
2. When placing walk adjacent to existing curb and gutter, curb and gutter will be repaired as necessary before placing concrete forms for walk.
3. Staking is required where no curb is present.
4. Thickened edge shall be constructed using cement concrete on all radii. All other locations shall be backfilled and compacted.
5. Combination walk shall be 7' min. on all commercial sites and arterial streets. Combination walk shall be a minimum of 5' on non arterial streets. Dimensions are from back of curb to back of walk. See contract plans for width and placement of sidewalk.
6. All expansion joints shall be full depth with $\frac{3}{8}$ " premolded joint filler.
7. All joints shall be cleaned and edged. External edges shall be $\frac{1}{2}$ " radius. Internal joints shall be $\frac{1}{4}$ " radius.
8. All soft and yielding foundation material shall be removed and replaced with crushed surfacing top course (CSTC) per Section 9-03.9(3) of the WSDOT Standard Specifications.
9. All sidewalk shall be replaced to the nearest expansion or contraction joint. All joints shall be saw cut full depth prior to restoration and $\frac{3}{8}$ " expansion joint installed. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.
10. For sidewalks within the North Slope Historical District area use Standard Plan HD-NS03. See Standard Plan HD-NS01 for North Slope Historic District site map.



SECTION DETAIL A-A

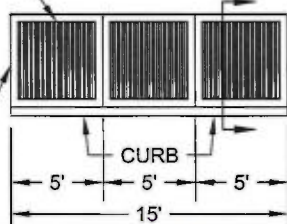


SECTION DETAIL B-B



TOP SURFACE SHALL BE BROOMED IN THE SAME DIRECTION AS THE EXPANSION JOINT

4" SHINER AROUND 15' PANEL $\frac{3}{8}$ " EXPANSION JOINT



$\frac{3}{8}$ " EXPANSION JOINT TO MATCH CURB JOINTS NOT TO EXCEED 15'

2" X $\frac{1}{4}$ " DEEP WESTERN GROOVER CONTRACTION JOINT (TYP.)

4" SHINER AROUND 15' PANEL $\frac{3}{8}$ " EXPANSION JOINT

TOP SURFACE SHALL BE BROOMED IN THE SAME DIRECTION AS THE EXPANSION JOINT

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PUBLIC WORKS

N/A

TACOMA POWER

ENVIRONMENTAL SERVICES

N/A

TACOMA WATER



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DATE

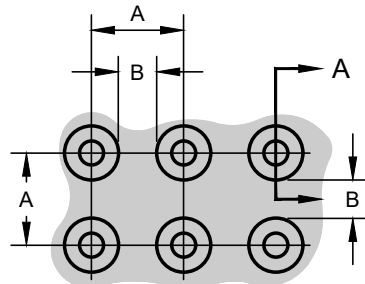
CITY OF TACOMA

CEMENT CONCRETE SIDEWALK

STANDARD PLAN NO. SU-04

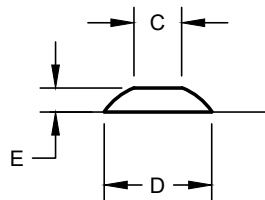
NOTES

1. The Detectable Warning Surface shall extend the full width of the curb ramp (exclusive of flares).
2. The rows of truncated domes in a Detectable Warning Surface shall be parallel with the direction of wheelchair travel.
3. See **Standard Plans SU-04** through **SU-05F** for sidewalk and curb ramp details.
4. If a curb is not present, place the Detectable Warning Surface at the edge of the pavement.
5. Detectable Warning Surfaces shall be either cast-in-place from Armor Tile, ADA Solutions, or an approved equal or surface applied from Vanguard or an approved equal. No detectable warning fasteners such as glue, bolts, or screws are allowed. Surface applied detectable warning surfaces may be used only when the curb ramp has associated features to deter vehicles from driving over the ramp area. Examples of such features include pedestrian curbing, utility/signal/streetlight poles, and fire hydrants.
6. Detectable warning surface shall be yellow and shall match SAE AMS Standard 595, Color 33538.
7. See **Standard Plan SU-05H** for Detectable Warning Surface placement guidelines.



TRUNCATED DOME DETAILS

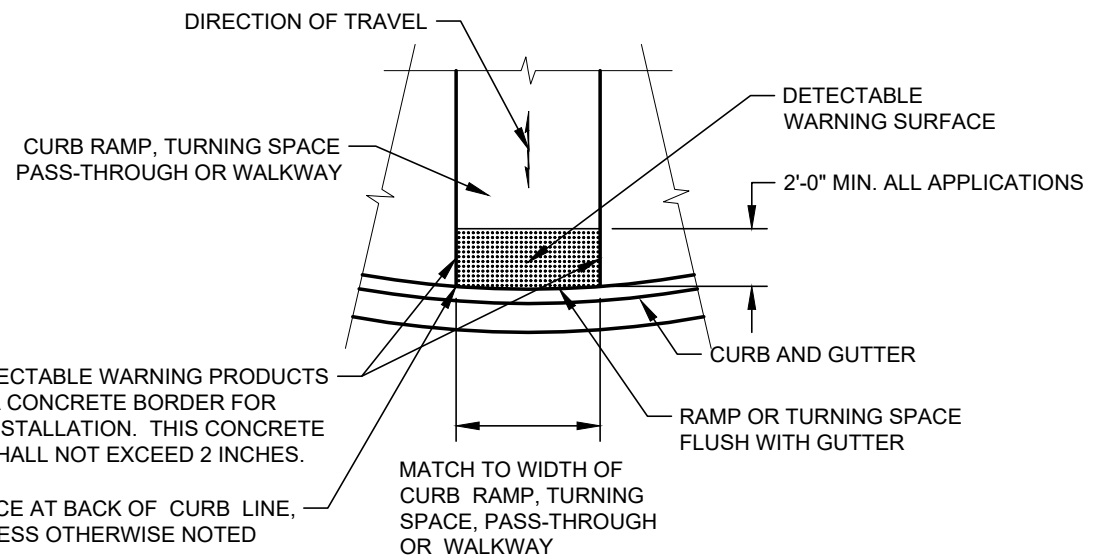
TRUNCATED DOME SPACING



SECTION DETAIL A-A

TRUNCATED DOME

	MIN.	MAX.
A	1.60"	2.40"
B	0.65"	-
C	0.45"	0.90"
D	0.90"	1.40"
E	0.20"	0.20"



DETECTABLE WARNING SURFACE DETAIL

RVDR

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TACOMA POWER

ENVIRONMENTAL SERVICES

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TACOMA WATER



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Kurtis Deankingsolver

CITY ENGINEER

04/19/2021

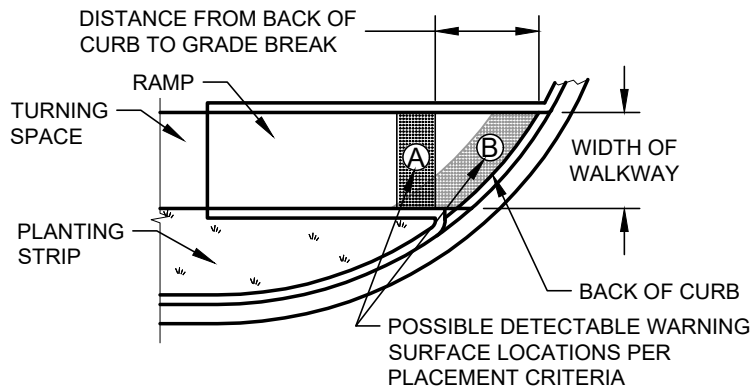
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CITY OF TACOMA

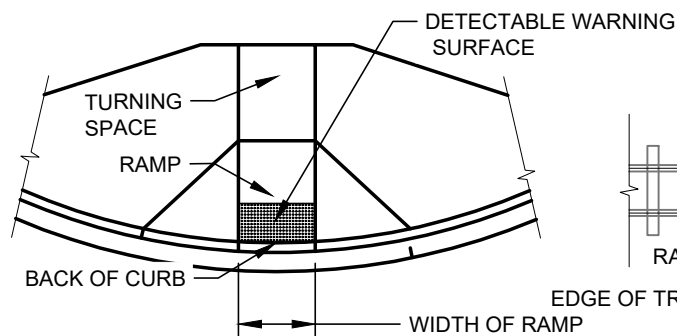
DETECTABLE WARNING SURFACE DETAILS

STANDARD PLAN NO.

SU-05G

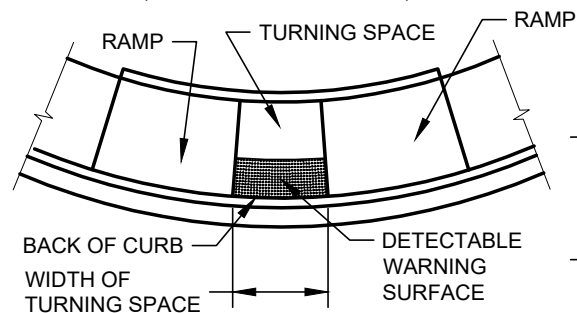


SINGLE DIRECTION CURB RAMP



PERPENDICULAR CURB RAMP

(SEE SU-05A AND SU-05B)



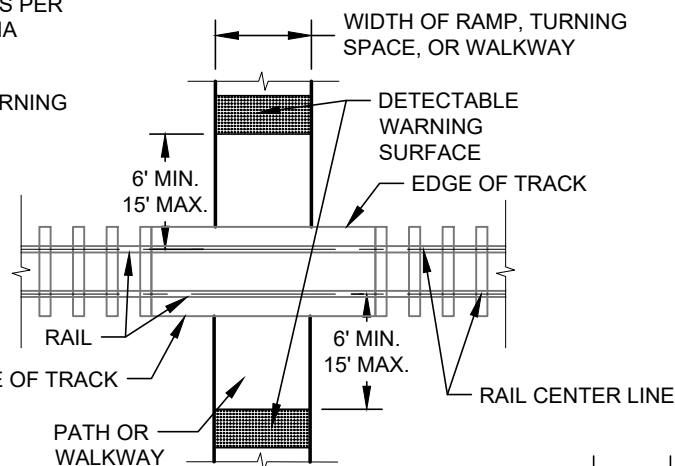
PARALLEL CURB RAMP

(SEE SU-05C, SU-05D, AND SU-05E)

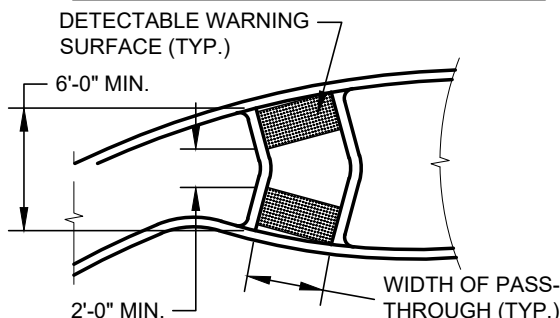
DETECTABLE WARNING PLACEMENT CRITERIA FOR SINGLE DIRECTIONAL CURB RAMP

USE LOCATION (A) IF DISTANCE FROM BACK OF CURB TO GRADE BREAK IS LESS THAN OR EQUAL TO 5 FT.

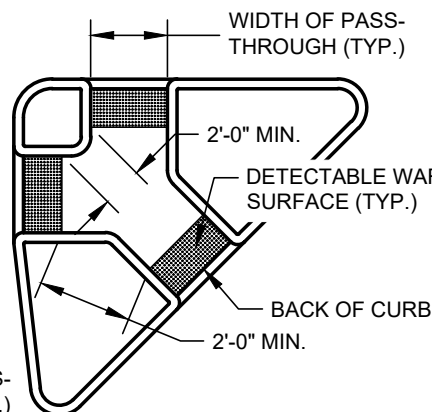
USE LOCATION (B) IF DISTANCE FROM BACK OF CURB TO GRADE BREAK IS GREATER THAN 5 FT.



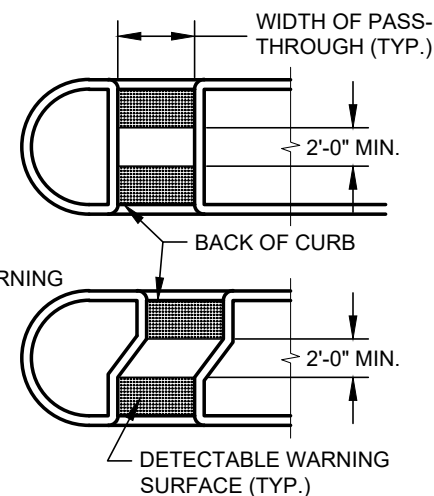
PEDESTRIAN RAILROAD CROSSING



ROUNDABOUT SPLITTER ISLAND



ISLAND PASS-THROUGH



MEDIAN PASS-THROUGH

NOTES

1. The Detectable Warning Surface shall extend the full width of the curb ramp (exclusive of flares).
2. The edge of the Detectable Warning Surface shall be placed along the back of the curb line unless otherwise noted.
3. The Detectable Warning Surface shall be within 2" (max.) of the edge of the ramp.
4. The rows of truncated domes in the Detectable Warning Surface shall be parallel with the direction of travel.
5. See Standard Plans for sidewalk and curb ramp details.
6. If a curb is not present, place the Detectable Warning Surface at the edge of the pavement.
7. See Standard Plan SU-05G for Detectable Warning Surface Details.

RVDR

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[Signature]

TACOMA POWER

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SERVICES

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TACOMA WATER



APPROVED FOR PUBLICATION

Kurtis Deankingsolver

CITY ENGINEER

04/19/2021

DATE

CITY OF TACOMA

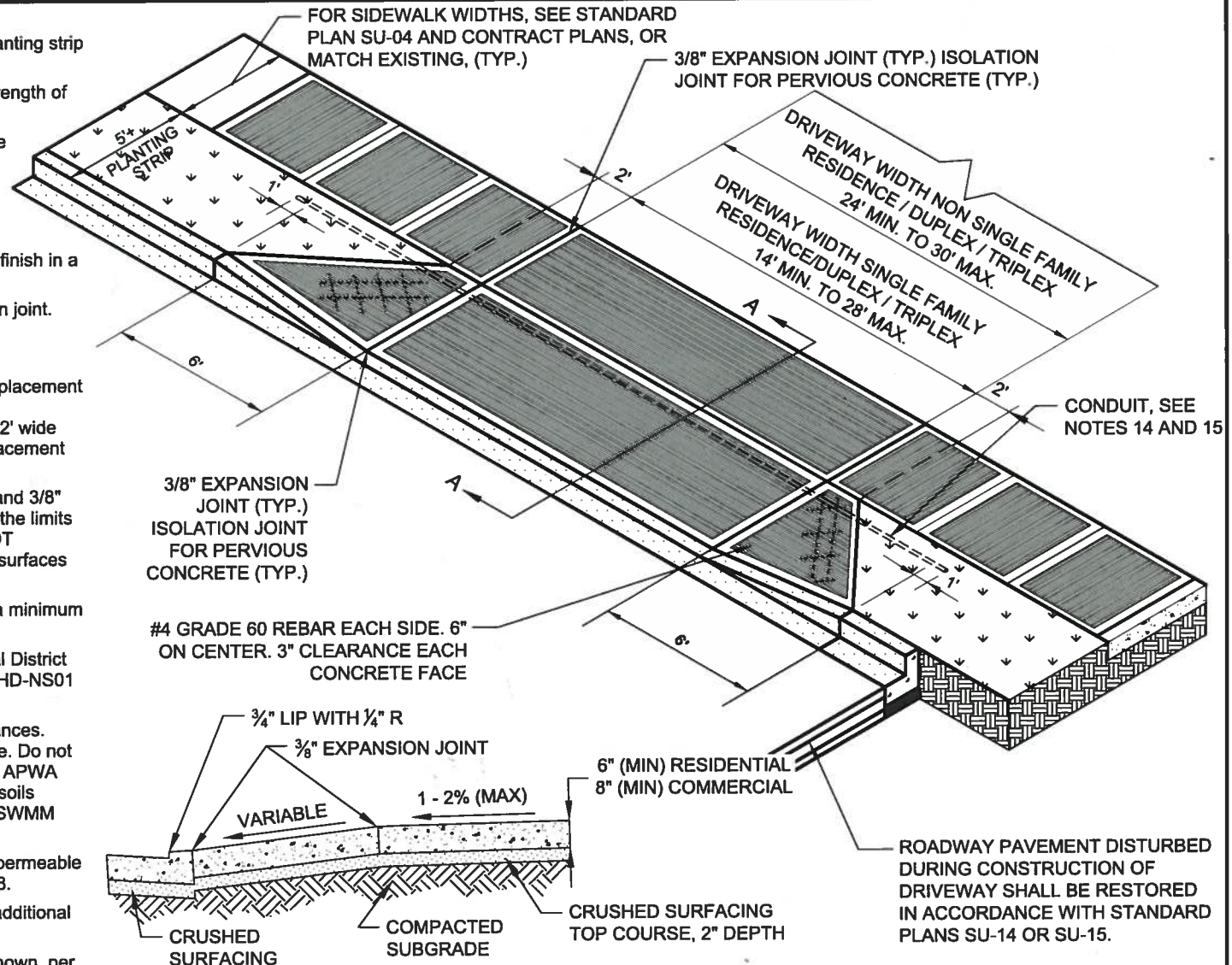
DETECTABLE WARNING SURFACE
PLACEMENT GUIDELINES

STANDARD PLAN NO.

SU-05H

NOTES:

1. Type 1 access shall be used at driveways where the planting strip width is 5' or greater.
2. Standard Concrete shall be a minimum compressive strength of 3,000 PSI.
3. All joints shall be cleaned & edged. External joints to the driveway shall be 1/2" radius. Internal joints to the driveway shall be 1/4" radius.
4. Driveways wider or narrower than shown on this plan require approval of the Director of Public Works.
5. Standard concrete driveway section shall be a brushed finish in a transverse direction to the center line of driveway.
6. Driveways wider than 20' require a center line expansion joint.
7. All expansion or isolation joints shall be full depth.
8. When trenching through a driveway access:
 - 8.a. If driveway is 20' or less in width, a full driveway replacement is required.
 - 8.b. If driveway is greater than 20' in width, a minimum 2' wide cut back over undisturbed soil is required and replacement shall extend to the nearest control joint.
9. All joints shall be saw cut full depth prior to restoration and 3/8" expansion joint installed. Cutting wheel run-out beyond the limits of the opening shall be filled in accordance with WSDOT Standard Specification 5-05.3(8)B for cement concrete surfaces and 5-04.3(5)C for asphalt concrete surfaces.
10. Transition panel from new access to sidewalk shall be a minimum of 5 feet.
11. For driveway entrances within the North Slope Historical District area use Standard Plan HD-NS02. See Standard Plan HD-NS01 for map of Historical District area limits.
12. Permeable surfacing may be allowed for driveway entrances. Refer to Standard Plans PD-01 and PD-02 as applicable. Do not compact subgrade for permeable surfacing and refer to APWA GSP 2-06.3(3) Subgrade for Permeable Pavements. A soils report is required and modeling may be necessary per SWMM BMP L633.
13. Geomembrane barrier required between standard and permeable sections. Refer to City of Tacoma Standard Plan GSI-18.
14. Refer to Tacoma Municipal Code 10.14, driveways for additional information.
15. A 1-1/4" Ø PVC Sch. 80 Conduit shall be installed as shown, per TMC 10.14.070. Conduit shall be buried 24 inches below finished grade.



NOTE: DESIGNED SECTION REQUIRED FOR PERMEABLE SURFACING. SEE NOTES 12 AND 13.

STANDARD CONCRETE SECTION DETAIL A-A

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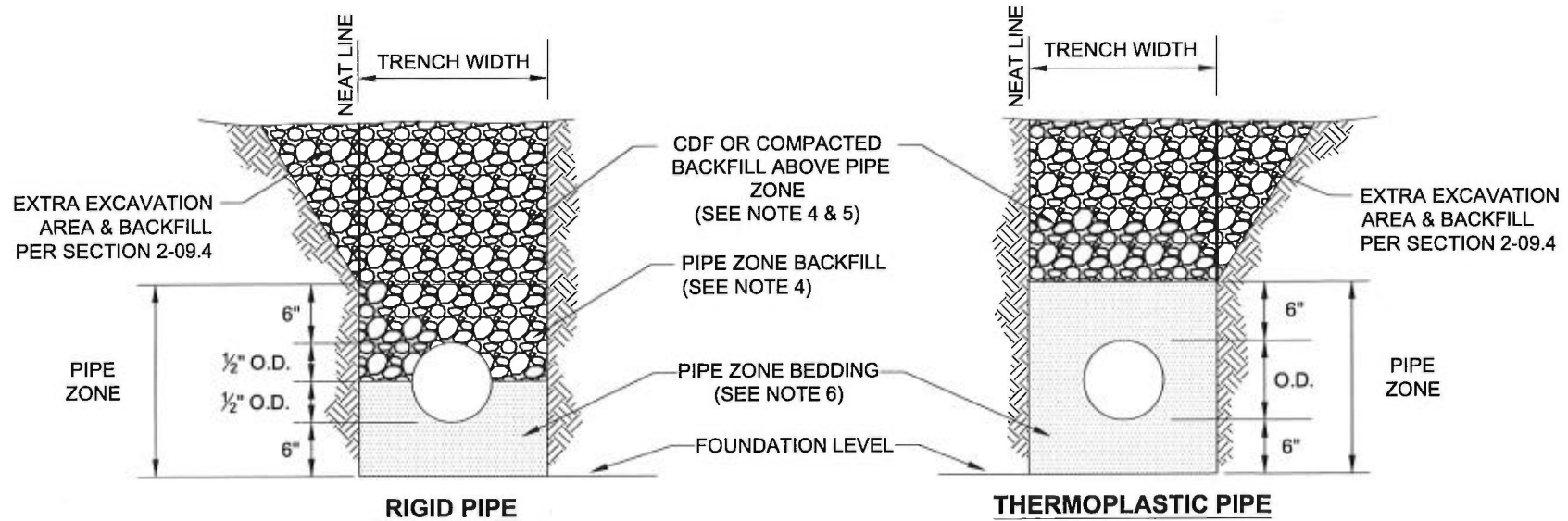
CITY ENGINEER

DATE

CITY OF TACOMA
CEMENT CONCRETE
ACCESS
TYPE 1

STANDARD PLAN NO.

SU-07



NOTES:

1. Provide uniform support under barrel and provide pockets in bedding for pipe bells.
2. Hand tamp under haunches.
3. Trench width shall be as specified in Section 2-09.4 of the WSDOT Standard Specifications.
4. Pipe zone backfill and backfill above pipe zone shall meet the material requirements of WSDOT Standard Specification Section 9-03.12(2) for gravel backfill for walls.
5. All trenches shall be compacted in accordance with SU-28.
6. Pipe zone bedding shall meet the material requirements of WSDOT Standard Specification Section 9-03.9(3) for crushed surfacing top course.

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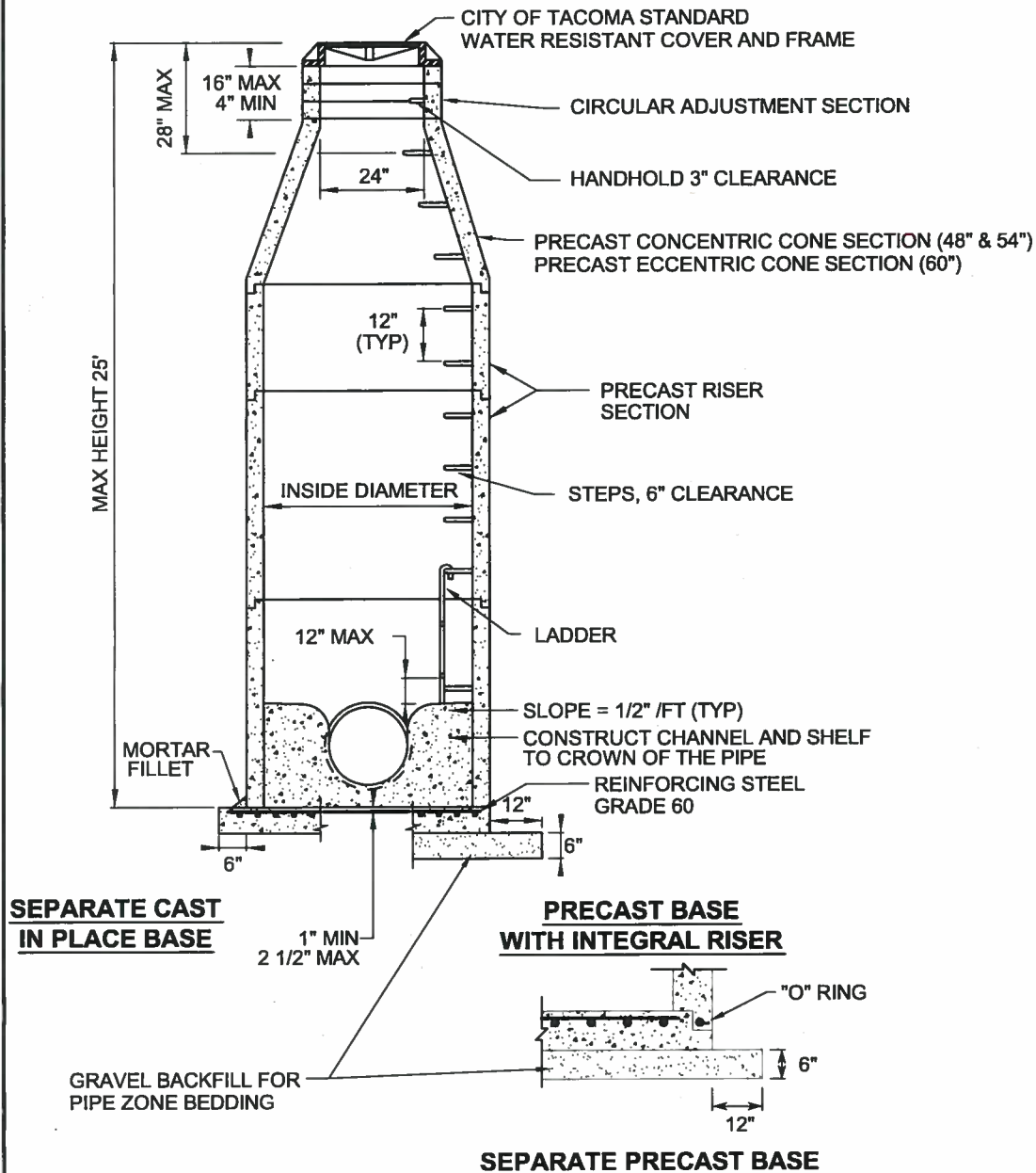
8/16/16

DATE

CITY OF TACOMA
PIPE ZONE BEDDING AND BACKFILL
FOR SANITARY AND STORM
SEWERS

STANDARD PLAN NO.

SU-16



NOTES:

1. For details showing grade ring, ladder, steps, handholds and top slabs, see Standard Plan No. SU-21.
2. Non-reinforced concrete in channel and shelf shall be Class 3000. All precast concrete shall be Class 4000.
3. Rubber gaskets shall be used in tongue and groove joints of pre-cast sections.
4. A flexible pipe-to-manhole connector shall be employed in all connections of rigid and flexible pipes to new precast concrete manholes. The connector shall be "Kor-N-Seal" with "Wedge Korband" manufactured by NPC, Inc., or approved equal.
5. Base reinforcing steel shall be per manufacturer's recommendation.

MANHOLE DIMENSION TABLE

INSIDE DIAMETER	MINIMUM WALL THICKNESS	MINIMUM BASE THICKNESS	MAXIMUM HOLE SIZE	MINIMUM DISTANCE BETWEEN HOLES
48"	4"	6"	36"	8"
54"	4 1/2"	8"	42"	8"
60"	5"	8"	48"	8"

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

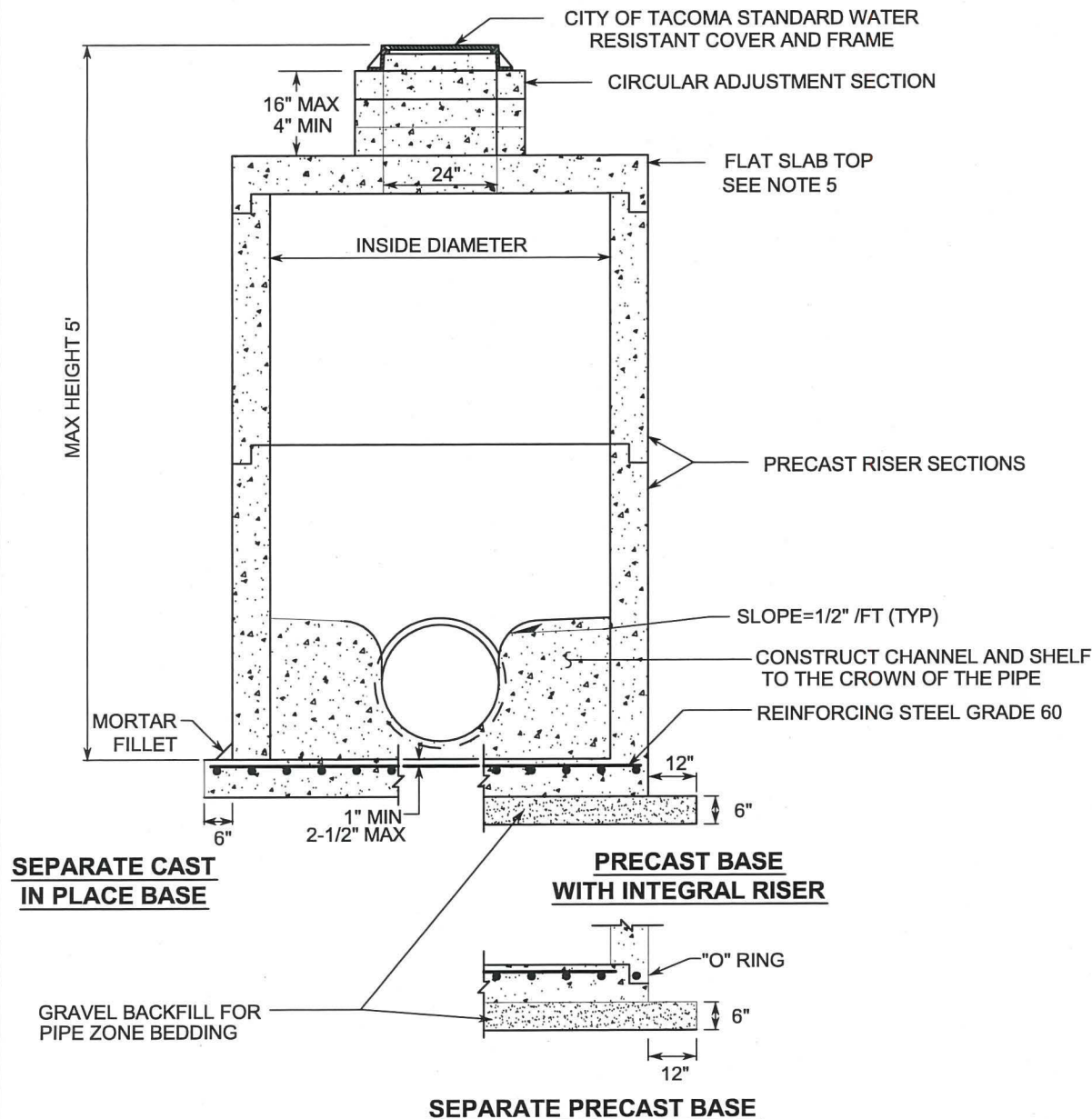
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CITY ENGINEER

[Signature]
DATE

MANHOLE-TYPE 1
48", 54" AND 60"

STANDARD PLAN NO. SU-17



NOTES:

1. For details showing grade ring and top slabs, see Standard Plan No. SU-21.
2. Non-reinforced concrete in channel and shelf shall be Class 3000. All precast concrete shall be Class 4000.
3. Rubber gaskets shall be used in tongue and groove joints of pre-cast sections.
4. A flexible pipe-to-manhole connector shall be employed in all connections of rigid and flexible pipes to new precast concrete manholes. The connector shall be "Kor-N-Seal" with "Wedge Korband" manufactured by NPC, Inc., or approved equal.
5. Manholes shall have the access hole centered over the channel on the upstream side of the manhole.
6. Base reinforcing steel shall be per manufacturer's recommendation.

MANHOLE DIMENSION TABLE				
INSIDE DIAMETER	MINIMUM WALL THICKNESS	MINIMUM BASE THICKNESS	MAXIMUM HOLE SIZE	MINIMUM DISTANCE BETWEEN HOLES
48"	4"	6"	36"	8"
54"	4 1/2"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	48"	12"
84"	8"	12"	48"	12"
96"	8"	12"	48"	12"
108"	10"	12"	48"	12"
120"	11"	12"	48"	12"

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DEPARTMENT OF PUBLIC WORKS

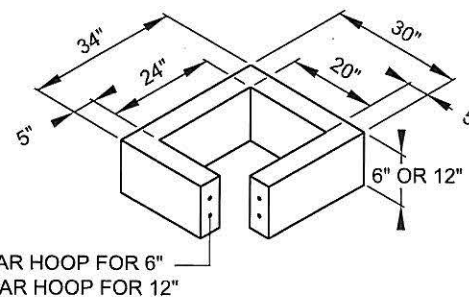
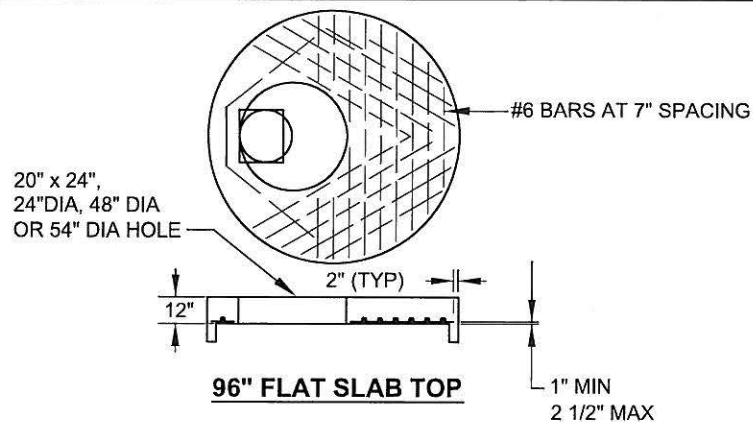
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CITY ENGINEER

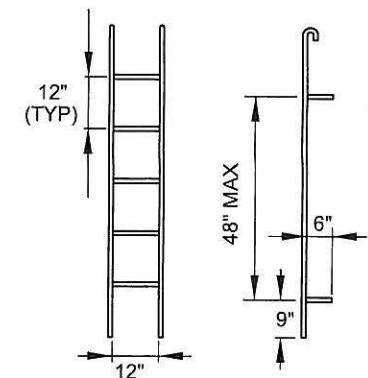
DATE

MANHOLE TYPE 3
5' MAXIMUM HEIGHT

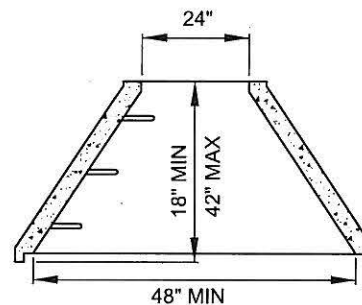
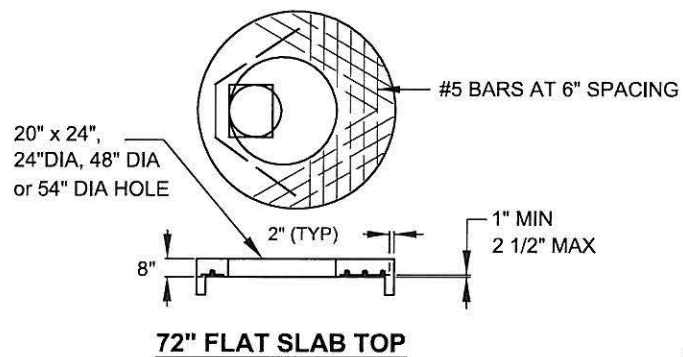
STANDARD PLAN NO. SU-19



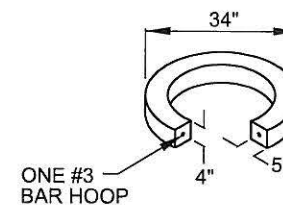
**RECTANGULAR ADJUSTMENT
SECTION**



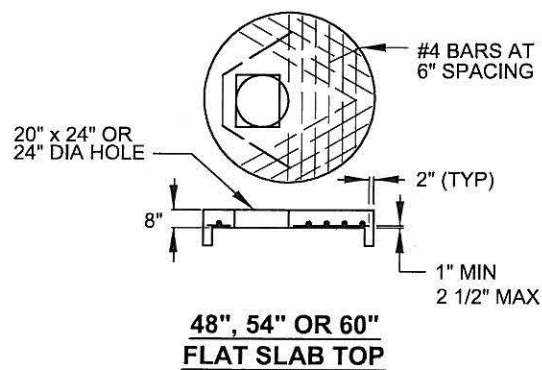
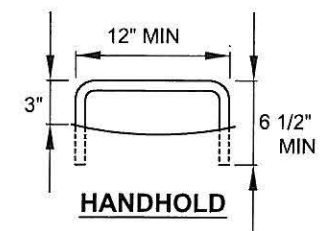
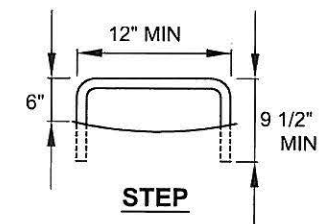
PREFABRICATED LADDER



CONCENTRIC CONE SECTION



**CIRCULAR ADJUSTMENT
SECTION**



NOTE:

As an acceptable alternate to rebar, wire mesh having a minimum area of 0.12 square inches per foot may be used for adjustment sections.

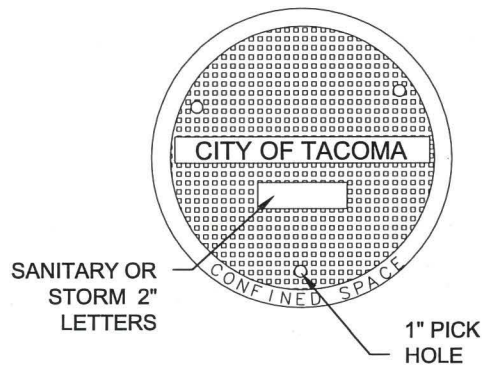
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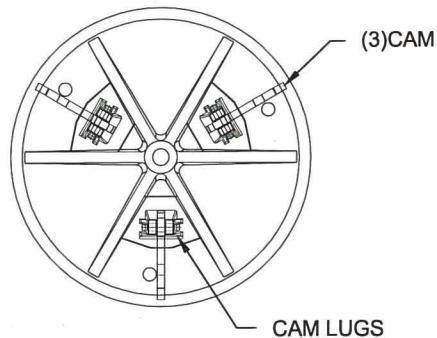
James Pervey
CITY ENGINEER

12 Jun 2009
DATE

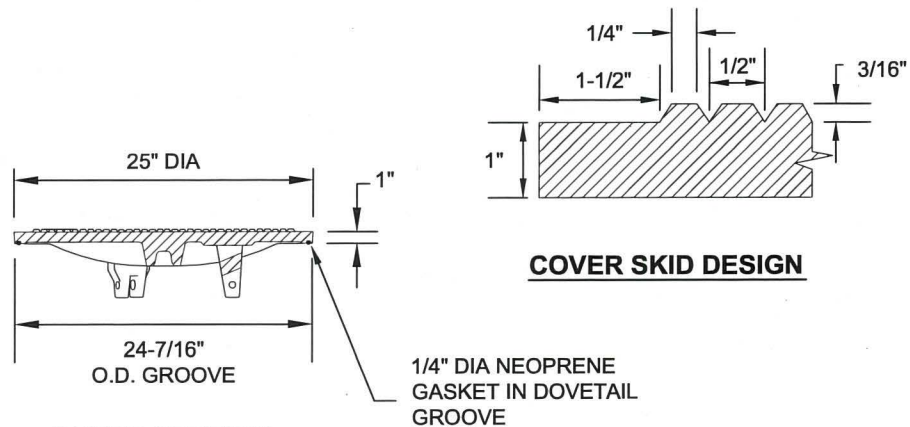
MISCELLANEOUS DETAILS
FOR MANHOLES AND
CATCH BASINS
STANDARD PLAN NO. SU-21



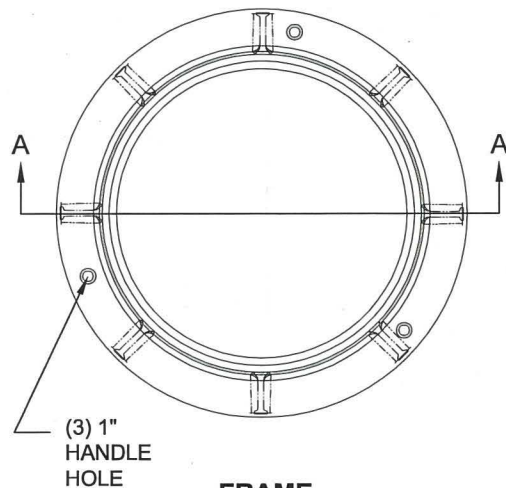
PLAN VIEW



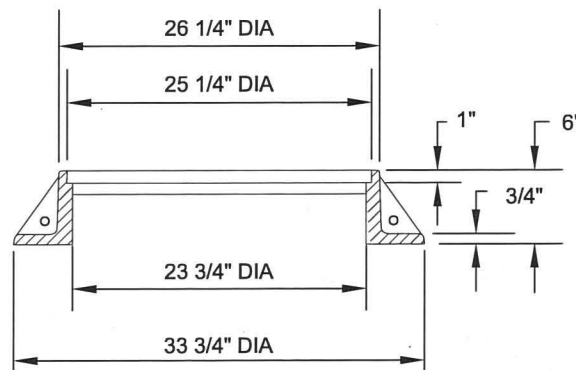
BOTTOM VIEW



COVER SECTION



FRAME



SECTION A-A

NOTES:

1. Covers shall have the word "SANITARY" in 2 inch raised letters when used with sanitary sewer installations, or "STORM" when installed with storm sewers. All covers shall have the words "CITY OF TACOMA" in 1-1/2 inch raised letters and the words "CONFINED SPACE" in 1-inch raised letters.
2. Lids must be interchangeable, any lid shall fit any and all frames.
3. Frame and cover shall be designed for H-20 loading.
4. Frame shall be grey-iron conforming to the requirements of AASHTO M 105, grade 30B.
5. Covers shall be ductile iron conforming to ASTM A 536, grade 80-55-06.
6. Per WSDOT Standard Specification 9-05.15, metal castings shall not be dipped, painted, welded, plugged, or repaired.

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DEPARTMENT OF PUBLIC WORKS

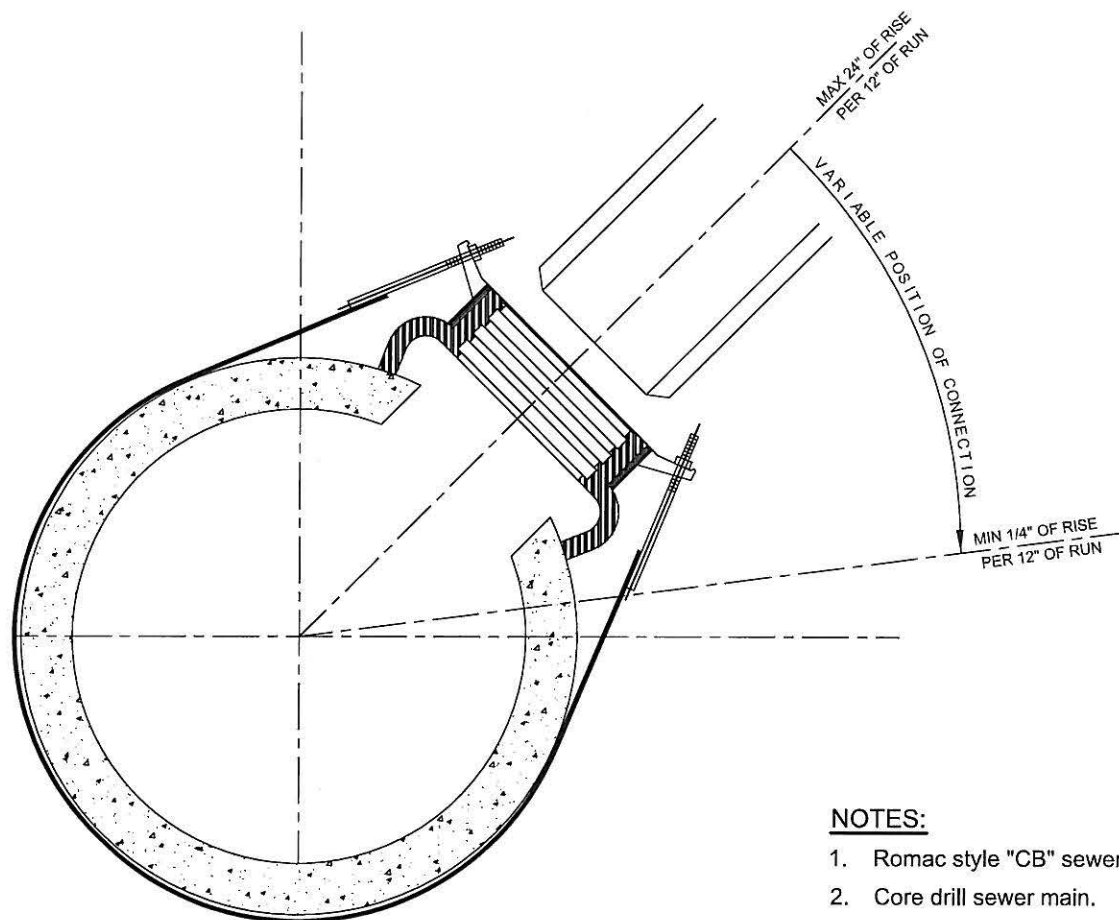
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[Signature]
CITY ENGINEER

1/17/04
DATE

MANHOLE FRAME AND COVER

STANDARD PLAN NO. SU-22



**SANITARY SEWER MAIN
CROSS SECTION**

NOTES:

1. Romac style "CB" sewer saddle or approved equal.
2. Core drill sewer main.
3. Portions of the City's sanitary sewer system have been lined. If a lined pipe is encountered during connection of the new side sewer, the Construction Division shall be contacted at (253) 591-5760 for further instructions.
4. Sewer laterals shall not extend beyond the interior wall of the sanitary sewer main.

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

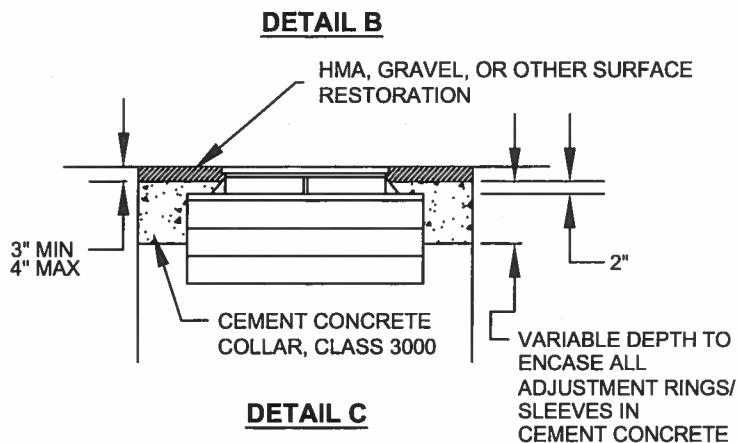
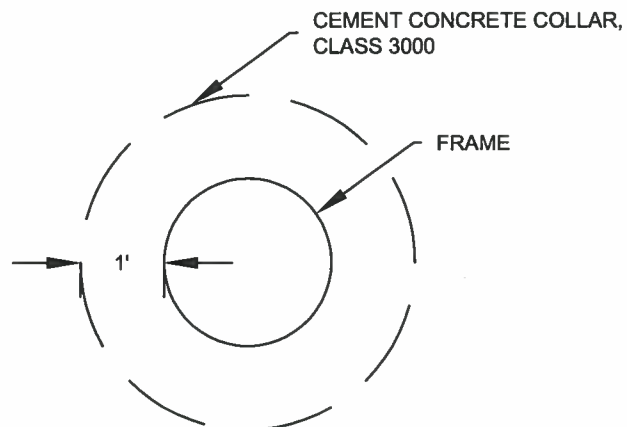
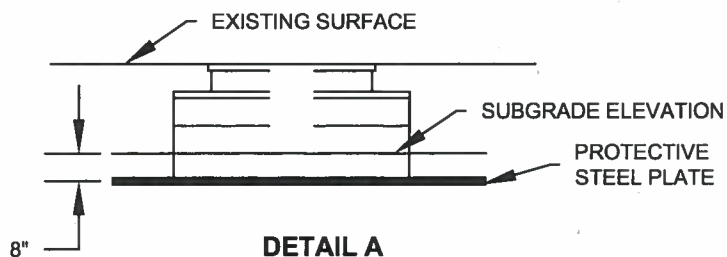
APPROVED FOR PUBLICATION

James Parvey
CITY ENGINEER

12 JUN 2009
DATE

LATERAL
SEWER CONNECTION TO
SANITARY SEWER MAIN

STANDARD PLAN NO. SU-23



PROGRESSION OF WORK

PRIOR TO EXCAVATING OR RESURFACING:

Contractor shall:
Remove frame and risers to a depth 8-inches below subgrade.
Install steel protective plate in accordance with Detail A.
Reference the location of the utility structure.

CONSTRUCTION OF SURFACING:

Gravel surfacing:
Install base materials and gravel over protective steel plate.

Asphalt surfacing:
Install base materials and asphalt over protective steel plate.

Concrete surfacing:
Adjust frame and grate to final grade prior to placing concrete surfacing.

UPON COMPLETION OF SURFACING:

The asphalt concrete pavement or gravel surfacing shall be removed in a neat circle in accordance with Detail B.

The location of the asphalt or gravel removal shall be based upon the reference location established by the Contractor.

Crushed surfacing and base materials shall be removed and disposed of to allow the removal of the steel protective plate.

The structure shall be adjusted to finish grade utilizing the same methods of construction as specified for new construction in Section 7-05.

For hot mix asphalt, the area shall then be backfilled with Class 3000 cement concrete to an elevation of 3 to 4 inches below the finished pavement surface. 24-hours after placing the concrete, HMA pavement CL. 3/8" PG 64-22 shall be placed in accordance with Standard Plan No. SU-15.

For non-paved surfaces, the area shall be backfilled with Class 3000 cement concrete to an elevation of 3 to 4 inches below the top of the casting and then backfilled with crushed surfacing top course and compacted.

NOTE:

All general provisions, construction and warranty requirements of the Right of Way Restoration Policy will be followed.

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

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CITY ENGINEER

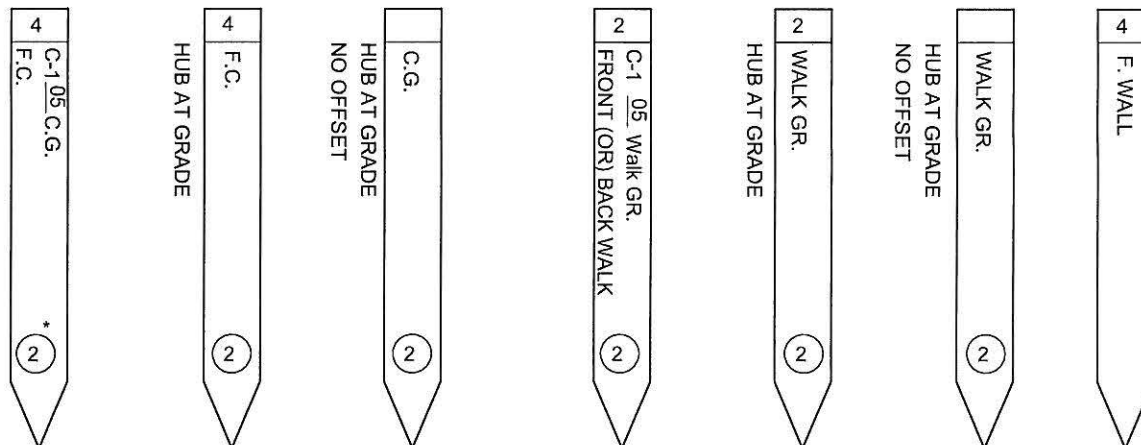
DATE

UTILITY ADJUSTMENT

STANDARD PLAN NO. SU-25

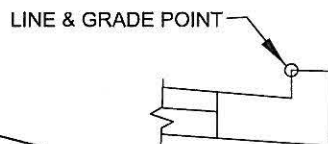
ABBREVIATIONS

F.C.....	FACE OF CURB
C.G.....	CURB GRADE
F.L.....	FLOW LINE
F.WALL...	FACE OF WALL
SH.GR....	SHOULDER GRADE
C.B.....	CATCH BASIN
M.H.....	MAN HOLE
L.H.....	LAMP HOLE
S.G.....	SUBGRADE
B.G.....	BALLAST GRADE
CR.R.GR.	CRUSHED ROCK GRADE
P.C.....	POINT OF CURVATURE
P.T.....	POINT OF TANGENCY
V.C.....	VERTICAL CURVE
E.P.....	EDGE OF PAVING

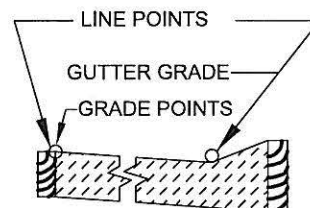


STAKES SHALL HAVE STATIONS ON BACK SIDE

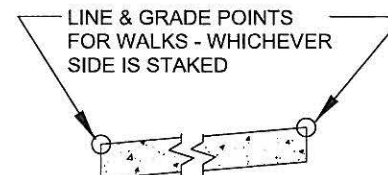
* DESIGNATES DISTANCE FROM GUARD STAKE TO GRADE OR LINE HUB. (OPTIONAL)



CURBS

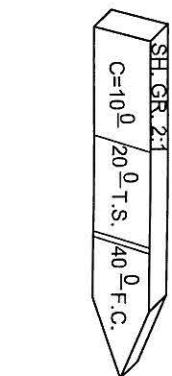


ALLEY SLABS

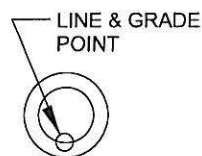
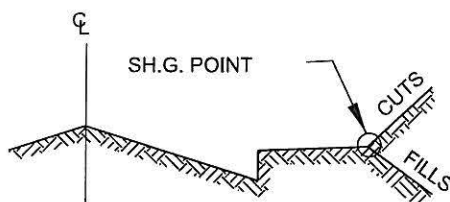


WALKS

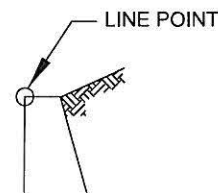
SIDE OR BACK



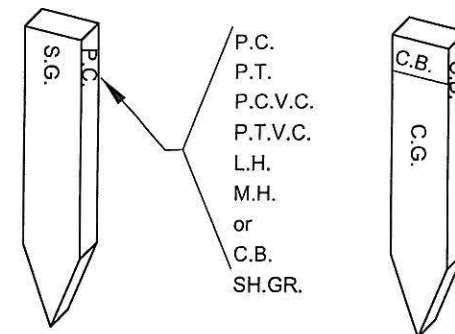
SLOPE STAKES



SEWERS



WALLS



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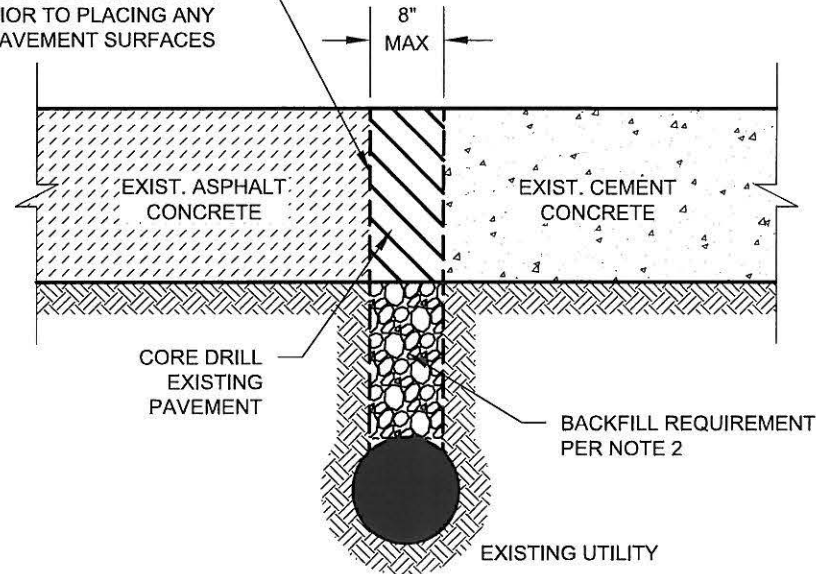
CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

James Pomeroy
CITY ENGINEER

12 Jun 2009
DATE

STANDARD PROCEDURE
FOR MARKING
CONSTRUCTION STAKES
STANDARD PLAN NO. SU-26

EXISTING SURFACES SHALL BE PREPARED IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION 5-04.3(5)A PRIOR TO PLACING ANY NEW PAVEMENT SURFACES



NOTES:

1. The existing pavement shall be cut full depth with an eight inch diameter core drill. The subbase material shall be removed using a vacuum excavator, keeping the excavation as minimal as possible.
2. Backfill the excavation with a six inch cushion of crushed rock over the utility then place the remaining void with CDF or compacted CSTC.
3. For asphalt concrete streets, repair the cored pavement section with HMA Class $\frac{1}{2}$ " PG 64-22 and seal the joint.
4. For cement concrete pavement streets, replace the cored section with Class 6000 cement concrete.
5. If excavation is larger than 8" core, restoration shall comply with the Right of Way Restoration Policy.

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DEPARTMENT OF PUBLIC WORKS

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June Perrey 12 Jun 2009
CITY ENGINEER DATE

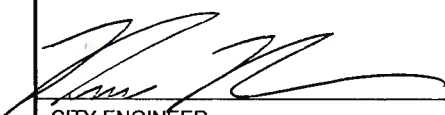
POTHOLING

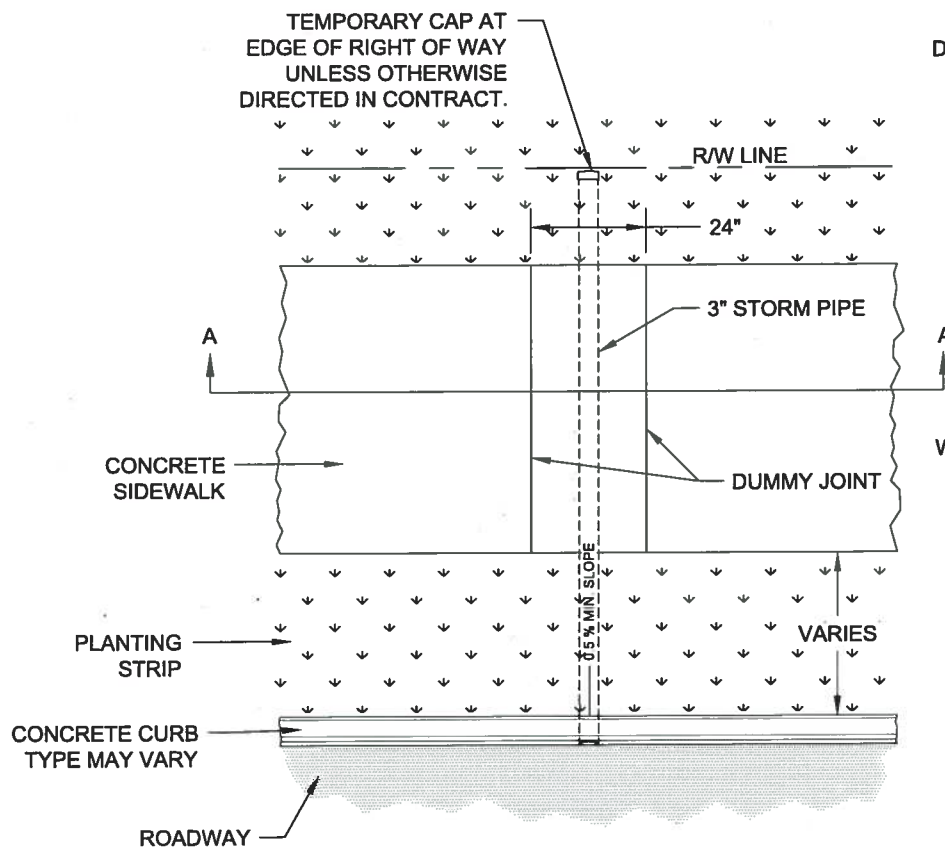
STANDARD PLAN NO. SU-27

COMPACTION TESTING REQUIREMENTS ^A		
DEPTH	TESTING FREQUENCY ^C	
	VERTICAL	HORIZONTAL
SURFACE (BELOW HMA)	N/A	1 TEST EVERY 150 LINEAR FEET OF TRENCH OR MINIMUM 2 PER TRENCH
		1 TEST FOR 150 SQUARE FEET FOR ISOLATED PATCHES ^B
1 TO 4 FEET (OR MIN 18 IN. ABOVE PIPE)	1 EVERY 12 INCHES	SAME AS FOR SURFACE
> 4 FEET TO BOTTOM OF TRENCH	NO SPECIFIC REQUIREMENT - MAY BE REQUIRED BY COT INSPECTOR FOR VERIFICATION OF COMPACTION	
A. TESTING SHALL BE PERFORMED BY A CERTIFIED INDEPENDENT TESTING LABORATORY OR A CERTIFIED TESTOR AS APPROVED BY THE CITY'S CONSTRUCTION DIVISION. THE COST OF TESTING IS THE RESPONSIBILITY OF THE PERMITTEE. TESTS SHALL BE COMPLETED AND REPORTS IDENTIFYING THE PROJECT NUMBER SUBMITTED TO THE CONSTRUCTION DIVISION WITHIN 48 HOURS OF TESTS.		
B. ONLY ONE COMPACTION TEST WILL BE REQUIRED FOR MULTIPLE TRENCHES WITHIN A 150 SF AREA PROVIDED COMPACTION PROCEDURES ARE THE SAME.		
C. EACH LIFT SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY, AS VERIFIED BY COMPACTION TESTING, BEFORE PROCEEDING TO THE NEXT LIFT. COT INSPECTOR MAY REQUIRE EXCAVATION AND REMOVAL OF SOIL WHERE COMPACTION IS IN QUESTION.		

NOTES:

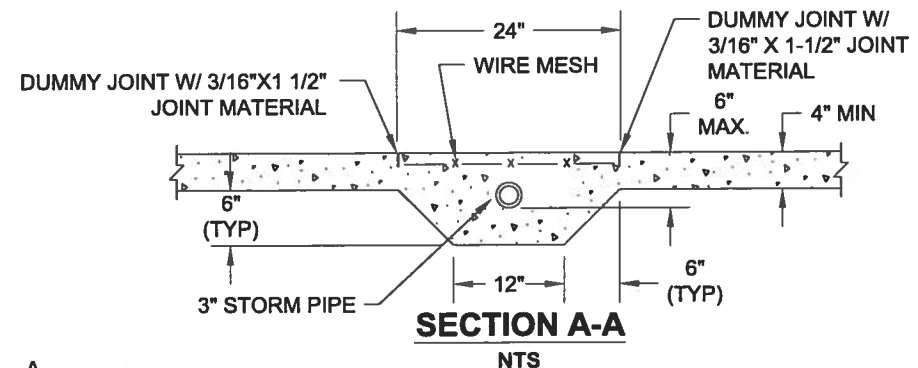
1. Compact backfill material in max. 12 in. lifts. Compact backfill material to 95% max. modified proctor density (ASTM 1557) except directly over pipe, hand tamp only.
2. Native backfill will require laboratory testing to determine max. modified proctor density. Imported backfill will require submittal of proctor test results from supplier.
3. See WSDOT Standard Specification Section 2-09.3(1)E for material requirements on "Controlled Density Fill" (CDF). CDF may be used for trenches less than 24 in. wide or as approved by the City Engineer. CDF shall be vibrated/compacted.

CITY OF TACOMA DEPARTMENT OF PUBLIC WORKS	APPROVED FOR PUBLICATION		TRENCH BACKFILL COMPACTION REQUIREMENTS	
	 CITY ENGINEER	11/30/16 DATE	STANDARD PLAN NO.	SU-28

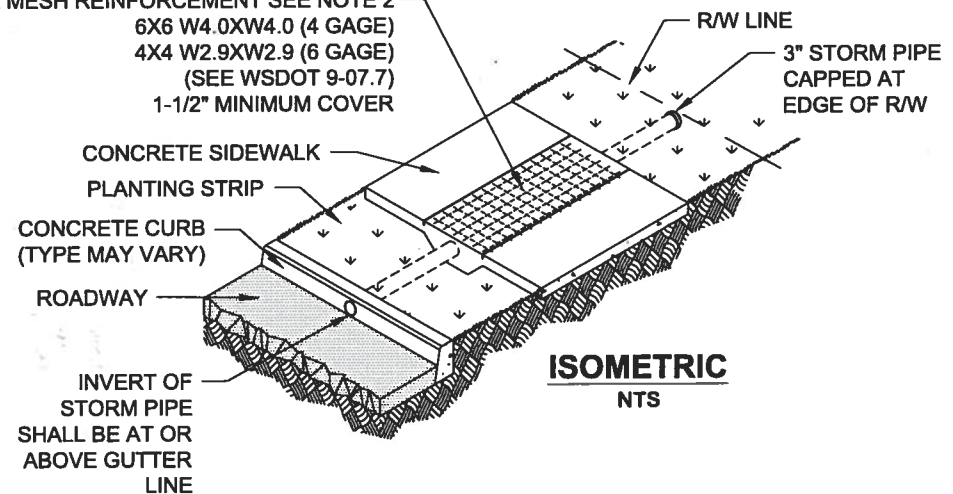


PLAN
NTS

(REINFORCEMENT NOT SHOWN)



WIRE MESH REINFORCEMENT SEE NOTE 2
6X6 W4.0XW4.0 (4 GAGE)
4X4 W2.9XW2.9 (6 GAGE)
(SEE WSDOT 9-07.7)
1-1/2" MINIMUM COVER



NOTES:

1. For new pervious concrete sidewalk, place joint directly over centerline of pipe. When placing pipe under existing pervious sidewalk, restoration with impervious concrete will be allowed.
2. No mesh reinforcement to be used for pervious sidewalks.
3. Storm pipe shall be per the City Stormwater Management Manual Volume 3 for pipes within the right-of-way.

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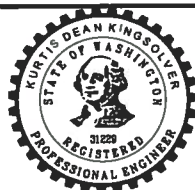
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ENVIRONMENTAL
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CITY ENGINEER

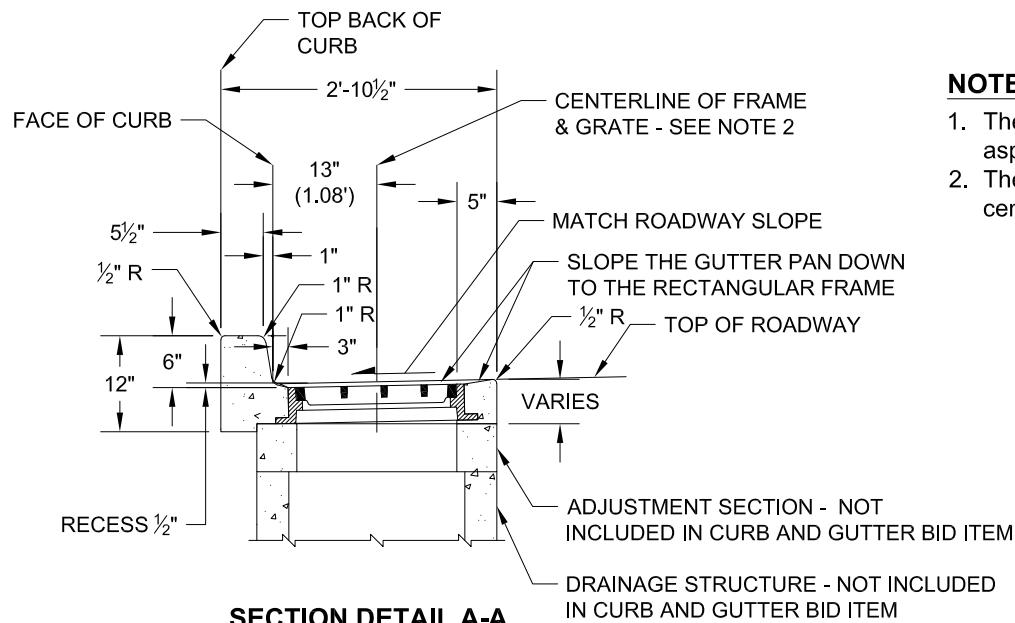
DATE

4/4/12

CITY OF TACOMA
STORM PIPE THROUGH
CONCRETE CURB

STANDARD PLAN NO.

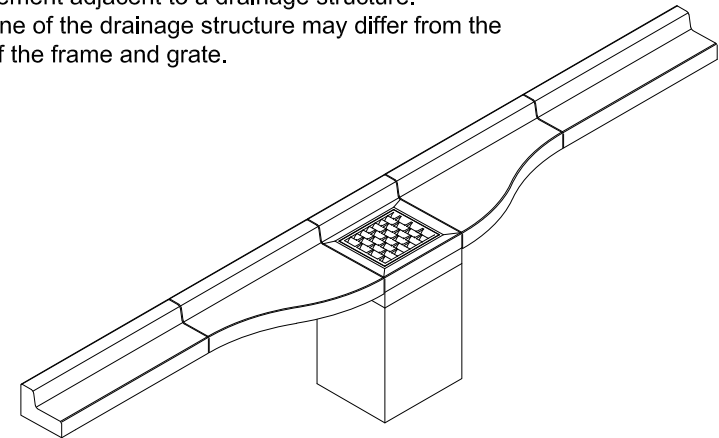
SU-29



SECTION DETAIL A-A

NOTES:

1. The intent of this design is to facilitate the compaction of hot mix asphalt pavement adjacent to a drainage structure.
2. The centerline of the drainage structure may differ from the centerline of the frame and grate.



RVDR

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Kurtis Kingsolver
CITY ENGINEER

04/19/2021

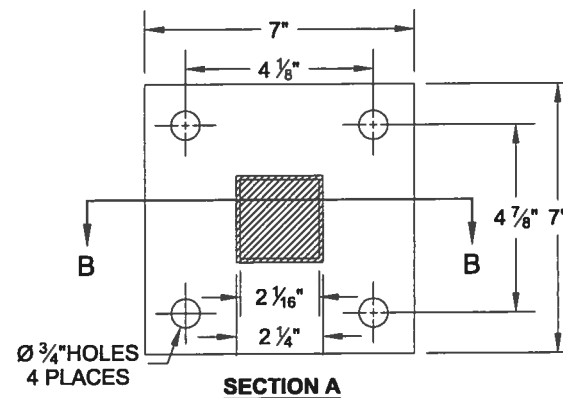
DATE _____

CITY OF TACOMA

CEMENT CONCRETE CURB AND GUTTER PAN

STANDARD PLAN NO. SU-30

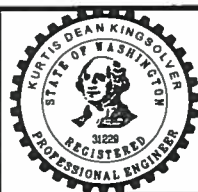
1. Surface mounting of sign posts, especially within traffic islands or medians, is only allowable with special authorization from the city's traffic engineering group, (Exception: Surface mounting of flexible post object markers within islands or medians is permitted).
2. If finished ground line is a hard surface, then compacted native backfill material shall be concrete with the top of foundation being smooth, dense, and uniform to finished ground line.



BASE PLATE DETAIL FOR
STEEL SIGN POST SURFACE MOUNTING
(SEE NOTE 1)

NA
TACOMA POWER

ENVIRONMENTAL
SERVICES
NA
TACOMA WATER

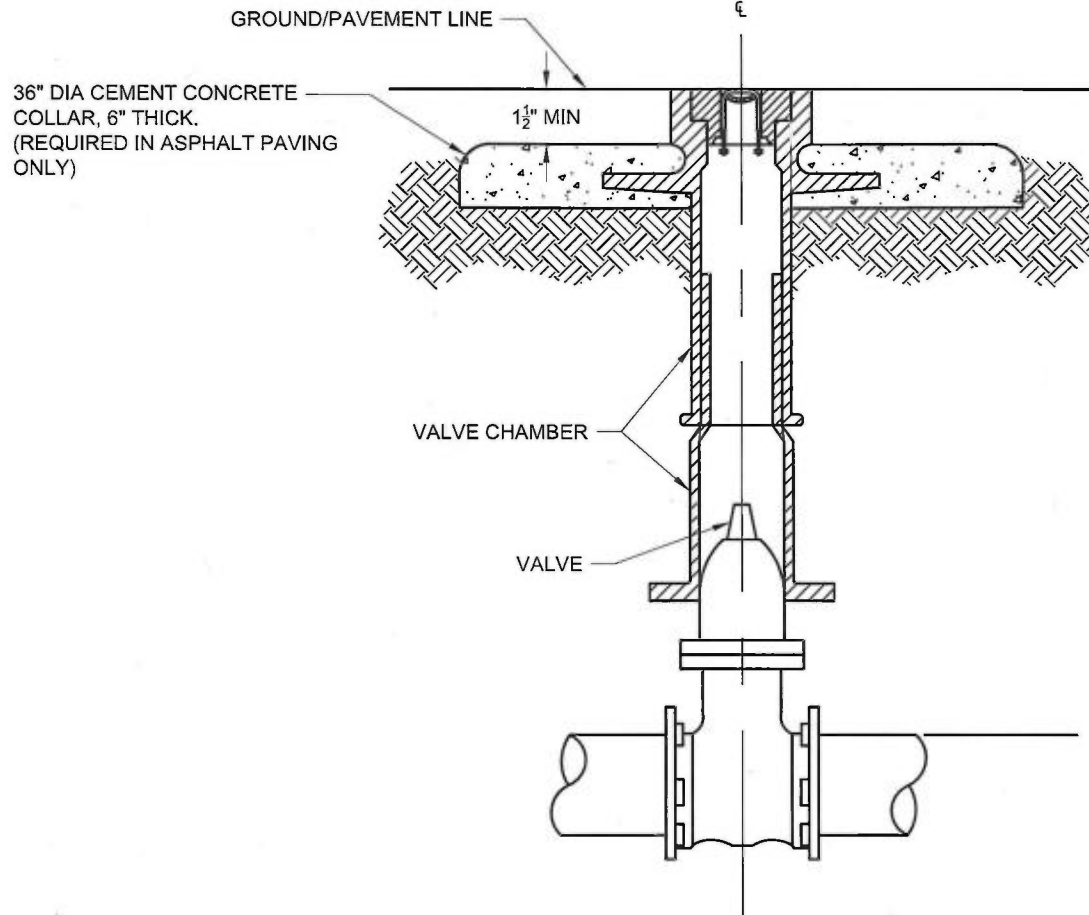


CITY ENGINEER

DATE _____

SIGN POST INSTALLATION

STANDARD PLAN NO. SU-34



NOTES:

Class 3000 cement concrete shall be placed, 1 1/2" min, below the finished pavement surface.

24-hours after placing the cement collar, HMA Class 3/8" PG 64-22 shall be placed in accordance with Standard Plan SU-15.

If the valve chamber being adjusted belongs to Tacoma Water, the Contractor shall contact Tacoma Water, Operations, at 253-502-8742 for final inspection.

REVIEWED BY

DCS
PUBLIC WORKS

ENVIRONMENTAL
SERVICES

N/A
TACOMA POWER

G.W.
TACOMA WATER



APPROVED FOR PUBLICATION

CITY ENGINEER

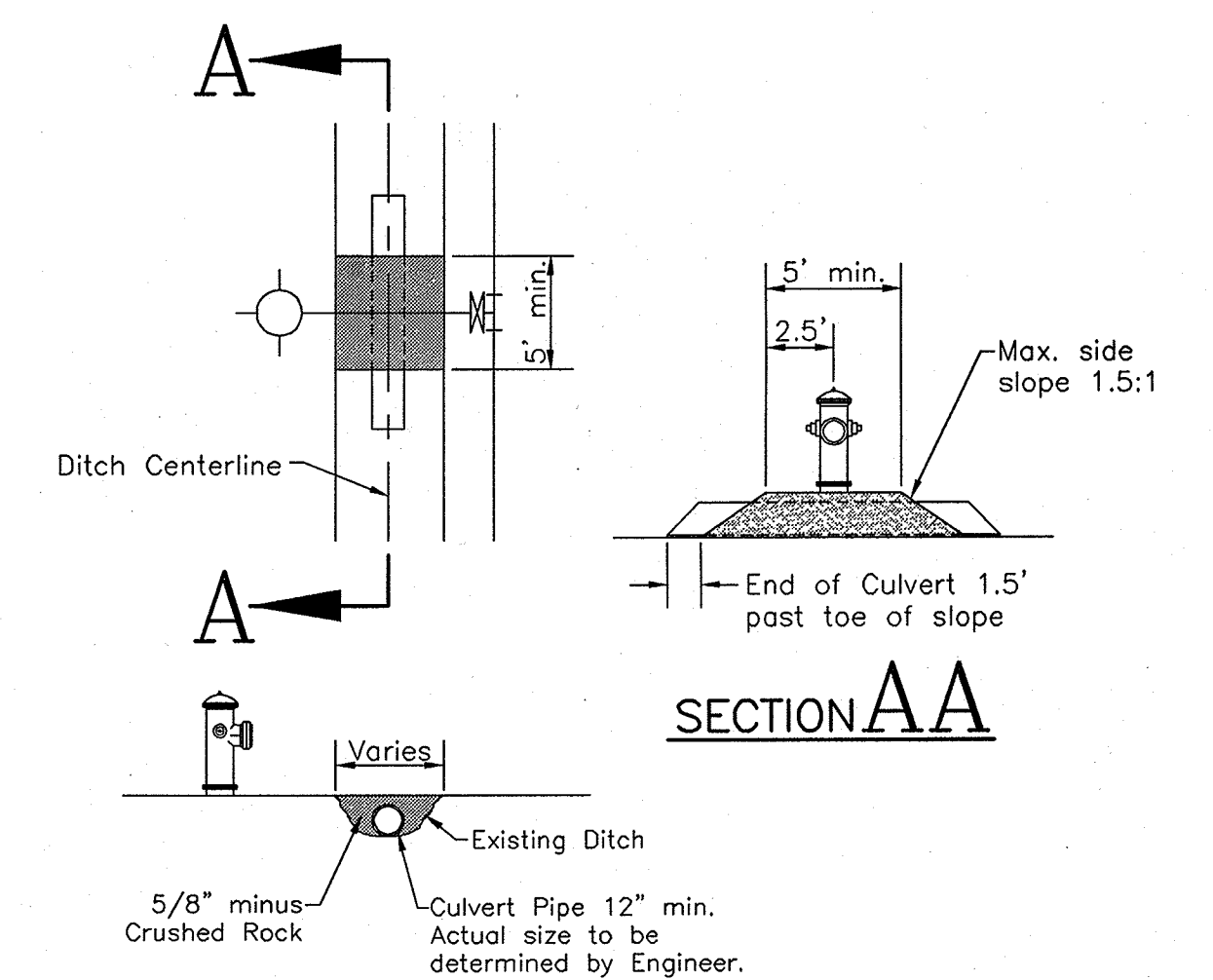
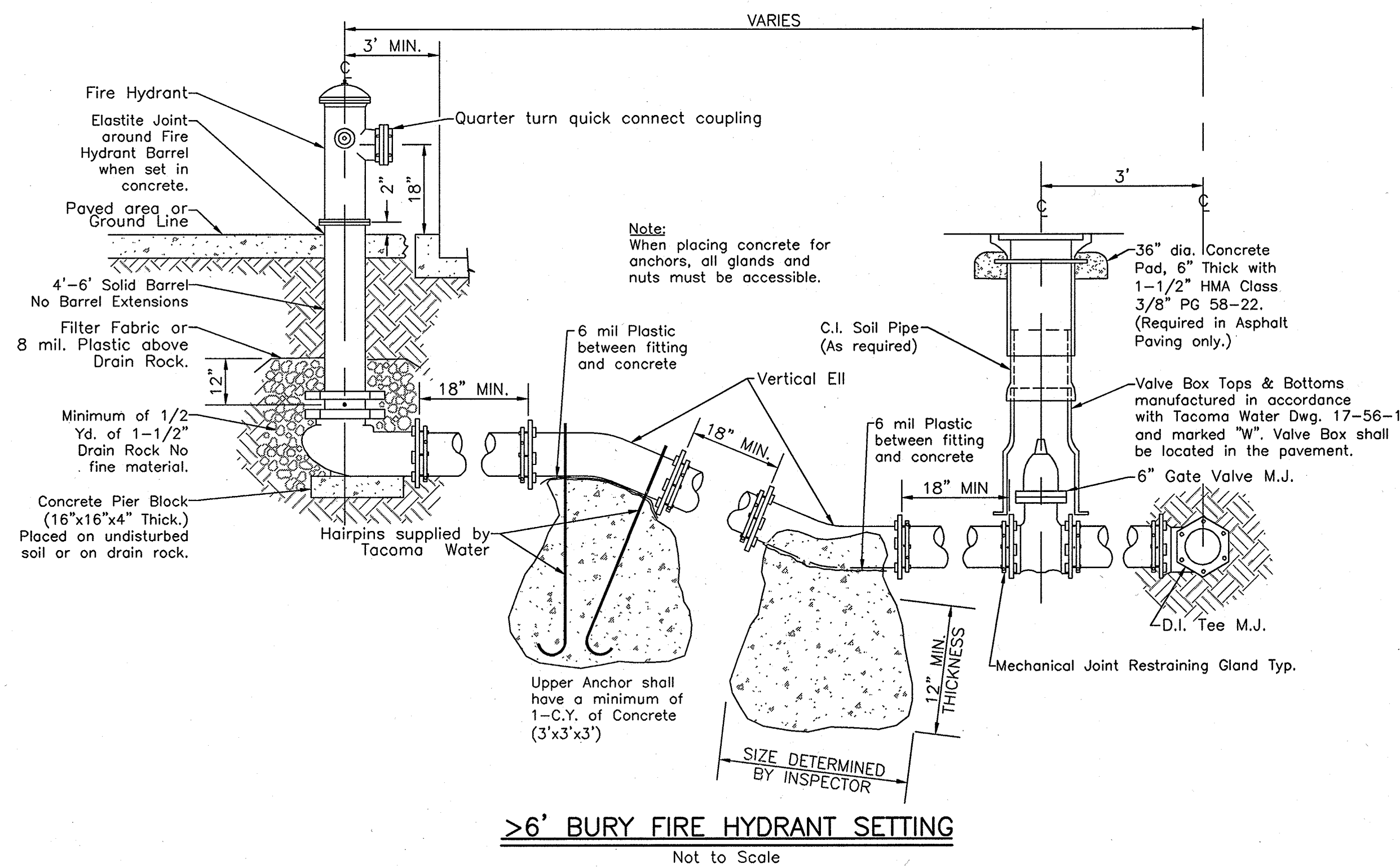
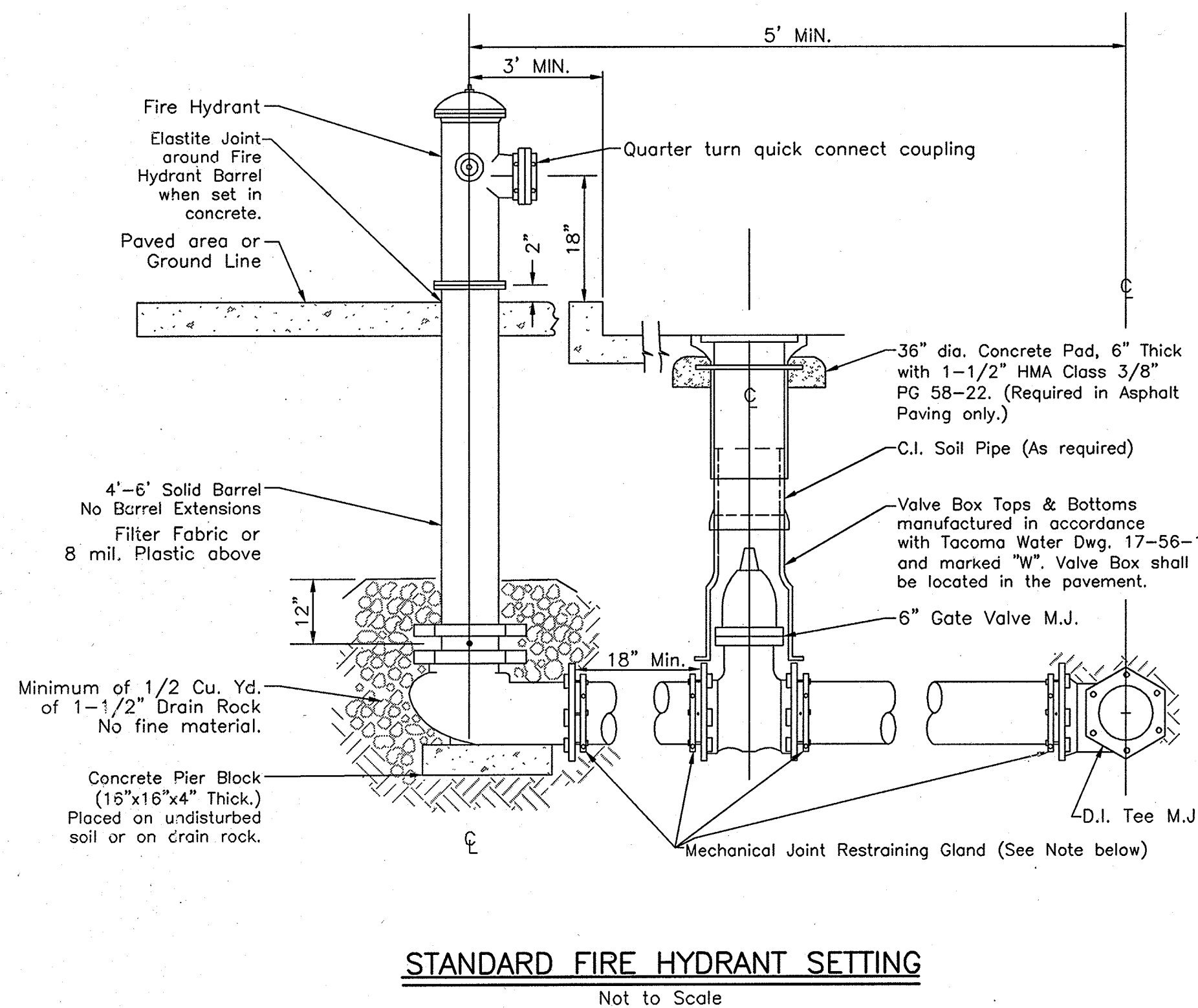
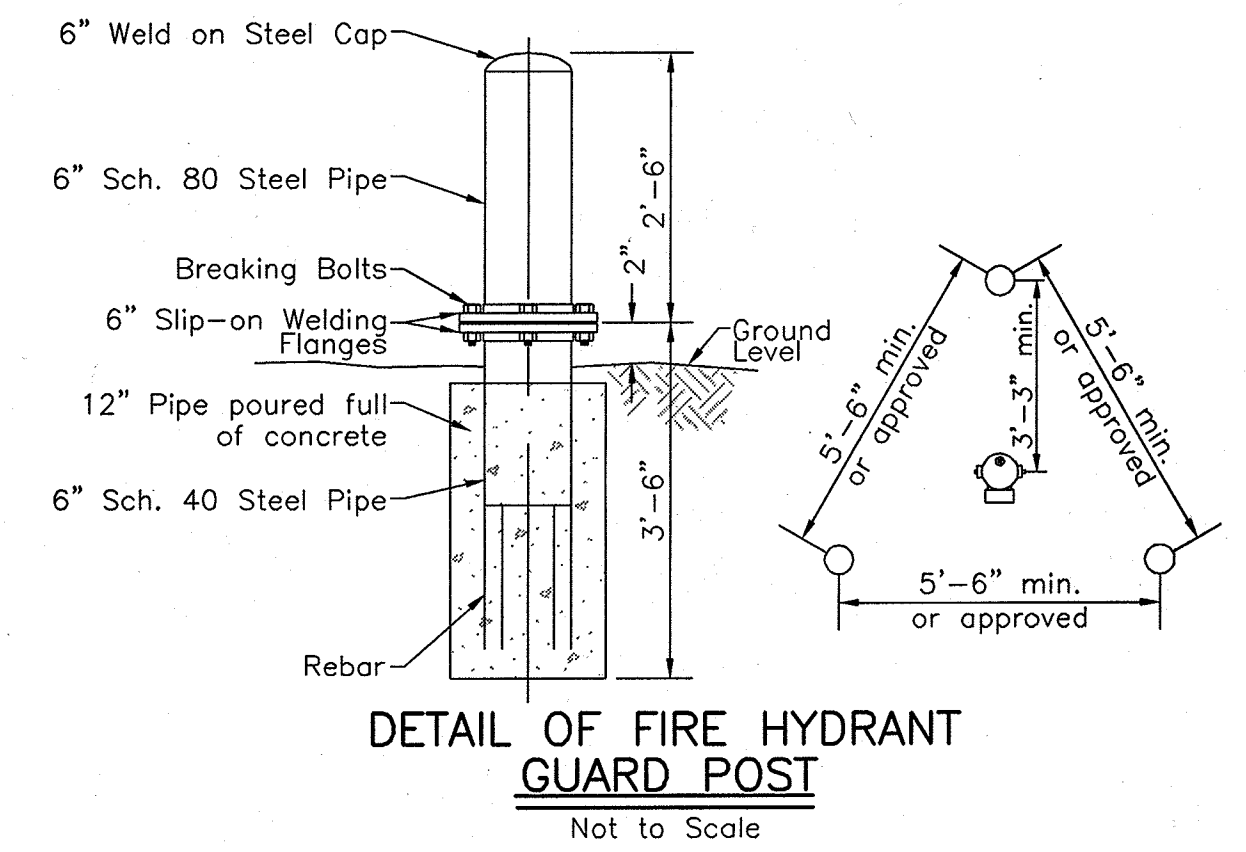
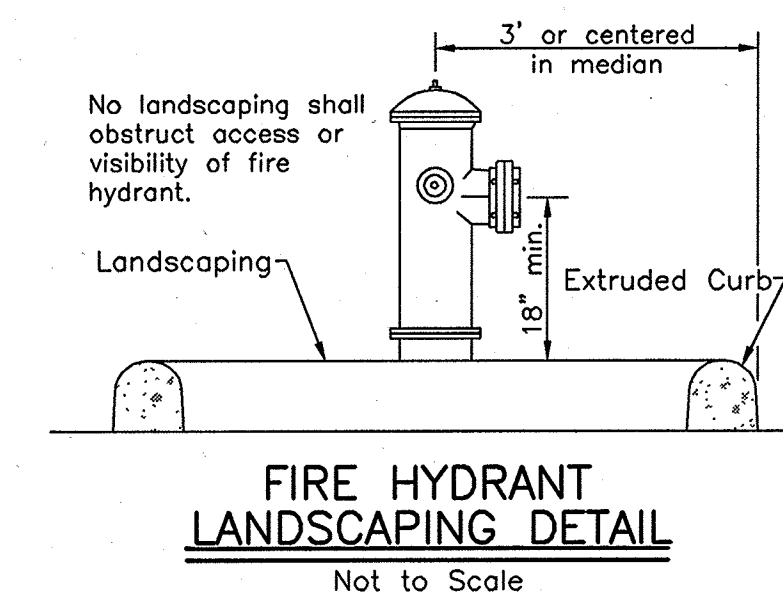
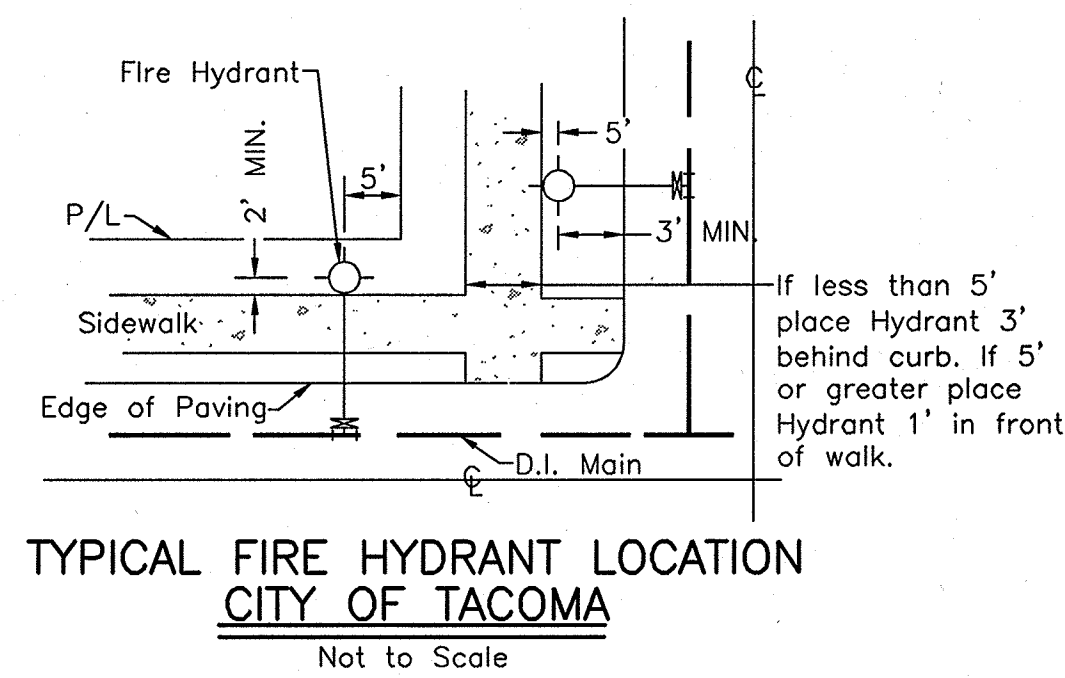
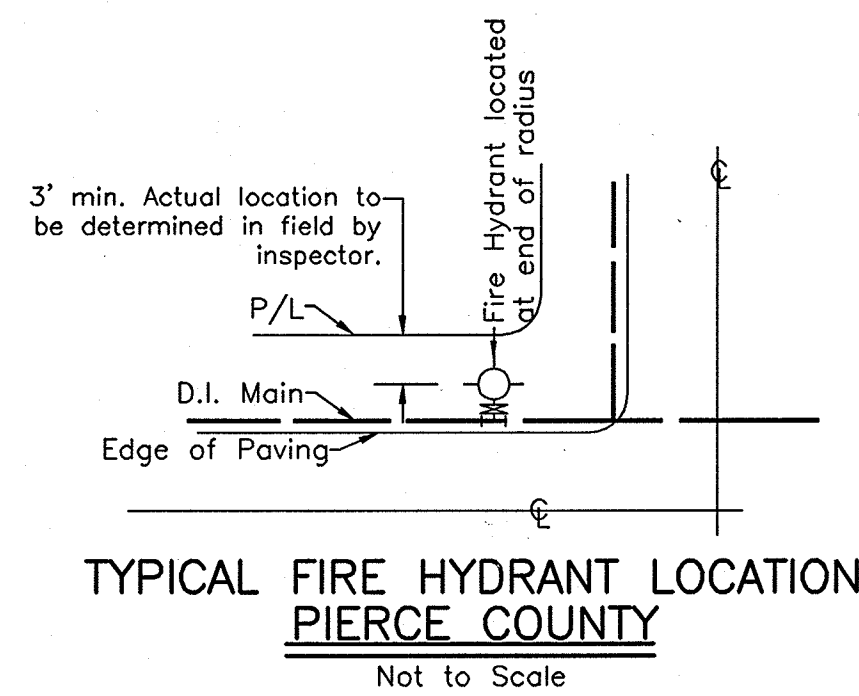
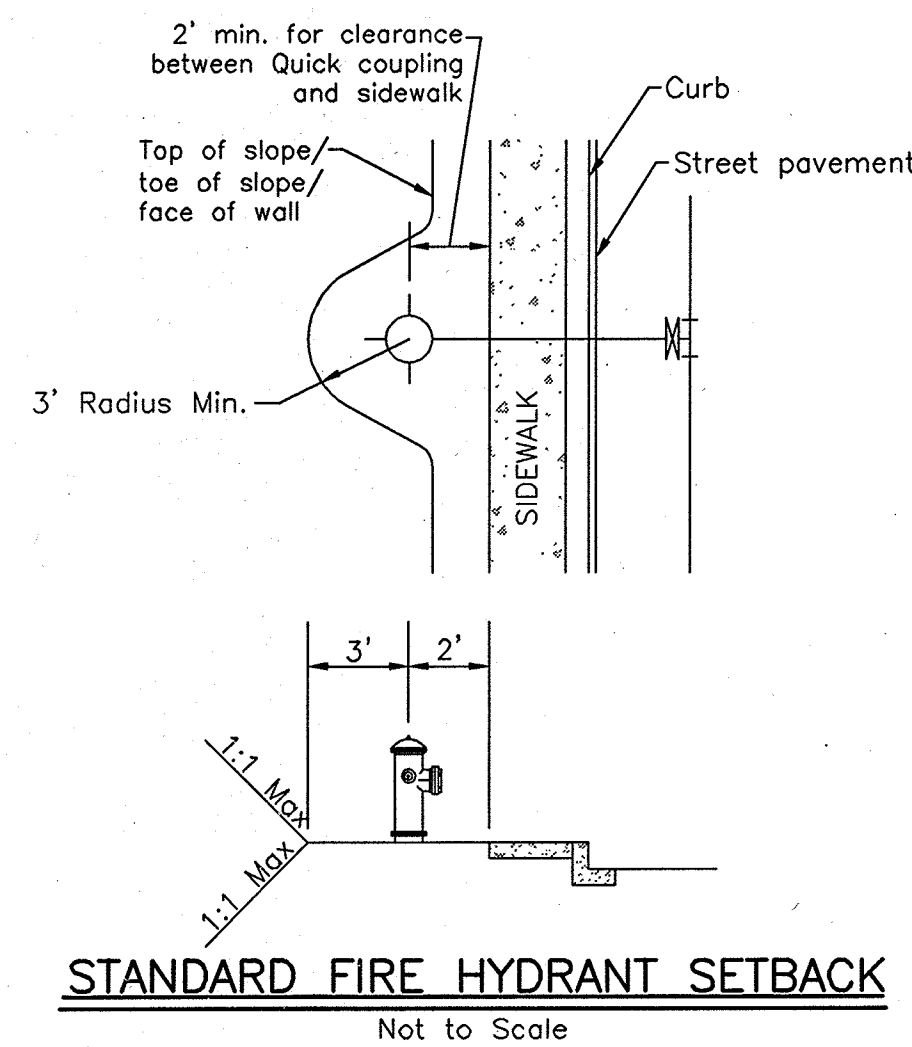
5/31/12
DATE

CITY OF TACOMA
VALVE CHAMBER
COLLAR DETAIL

STANDARD PLAN NO. SU-37

STANDARD DETAILS

17-56-1



FIRE HYDRANT NOTES:

All Fire Hydrants shall be provided with Pumper nozzle and Quarter turn quick connect coupling threads of the size and types indicated by the local jurisdiction unless specified otherwise by Tacoma Water. Jurisdictional sizing shall be as follows:

Bonny Lake	4-1/2"	NST	w/ 5"	Storz
Cumberland	4-1/2"	NST	w/ 5"	Storz
Enumclaw	4-1/2"	NST	w/ 5"	Storz
Federal Way/ Fire Dist #39	4"	Tacoma	w/ 4"	Storz
File	4"	Tacoma	w/ 5"	Storz
Fircrest	4"	Tacoma	w/ 5"	Storz
Lakewood	4-1/2"	NST	w/ 5"	Storz
Orting	4-1/2"	NST	w/ 5"	Storz
Puyallup	4"	Tacoma	w/ 5"	Storz
Pierce County, Unincorporated	4-1/2"	NST	w/ 5"	Storz
Ruston	4"	Tacoma	w/ 5"	Storz
Tacoma	4"	Tacoma	w/ 5"	Storz
University Place	4"	Tacoma	w/ 5"	Storz

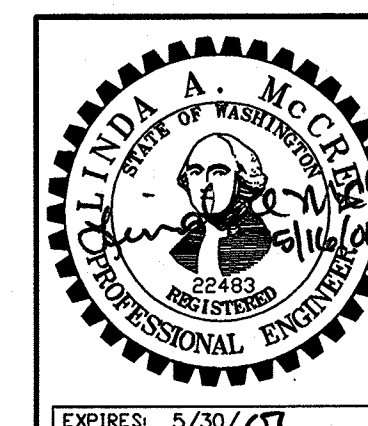
The quarter turn quick connect coupling must be provided with a suction gasket. A minimum of 30 foot pounds, using the wrench described in chapter 4 of the NFPA Standard 1983-93 or 40 foot pounds measured from the center of the cap, is required to remove blind cap from the coupling. The blind cap of the quick connect coupling, must be connected to the barrel section of the fire hydrant with vinyl coated cable (304 stainless steel, 7x7 strand with clear vinyl coating, cable diameter to be 3/32 inch bare and 3/16 inch finished). The cable length will be determined by the Water Division construction inspector. Couplings provided with a locking mechanism on the body of the coupling must be identified by a red cable connecting the blind cap to the body of the coupling.

M.J. Pipe with Mechanical Joint Restraining Glands or push on joint pipe with push on restraining gaskets are required between Fire Hydrant and Gate where distance is greater than one pipe length.

Fire Hydrant locations inside Tacoma City Limits shall be 2' behind the sidewalk. If the back of the sidewalk is less than 3' from the property line, the Fire Hydrant location shall be 1' in front of the sidewalk.

If Fire Hydrant bury is greater than (6) six feet, vertical ells shall be used to bring bury to a minimum of (4) four feet. Deviations may be permitted based on field conditions as determined by inspector.

Landscaping of any sort shall not obstruct access or visibility of fire hydrant.




3	Add sheet 2	4/06	JJA	
2	Changed Fire Hydrant notes.	6/03	JJA	
1	Change Megalug note	4/01	JJA	HLP
NO.	REVISION	DATE	BY	APP'D

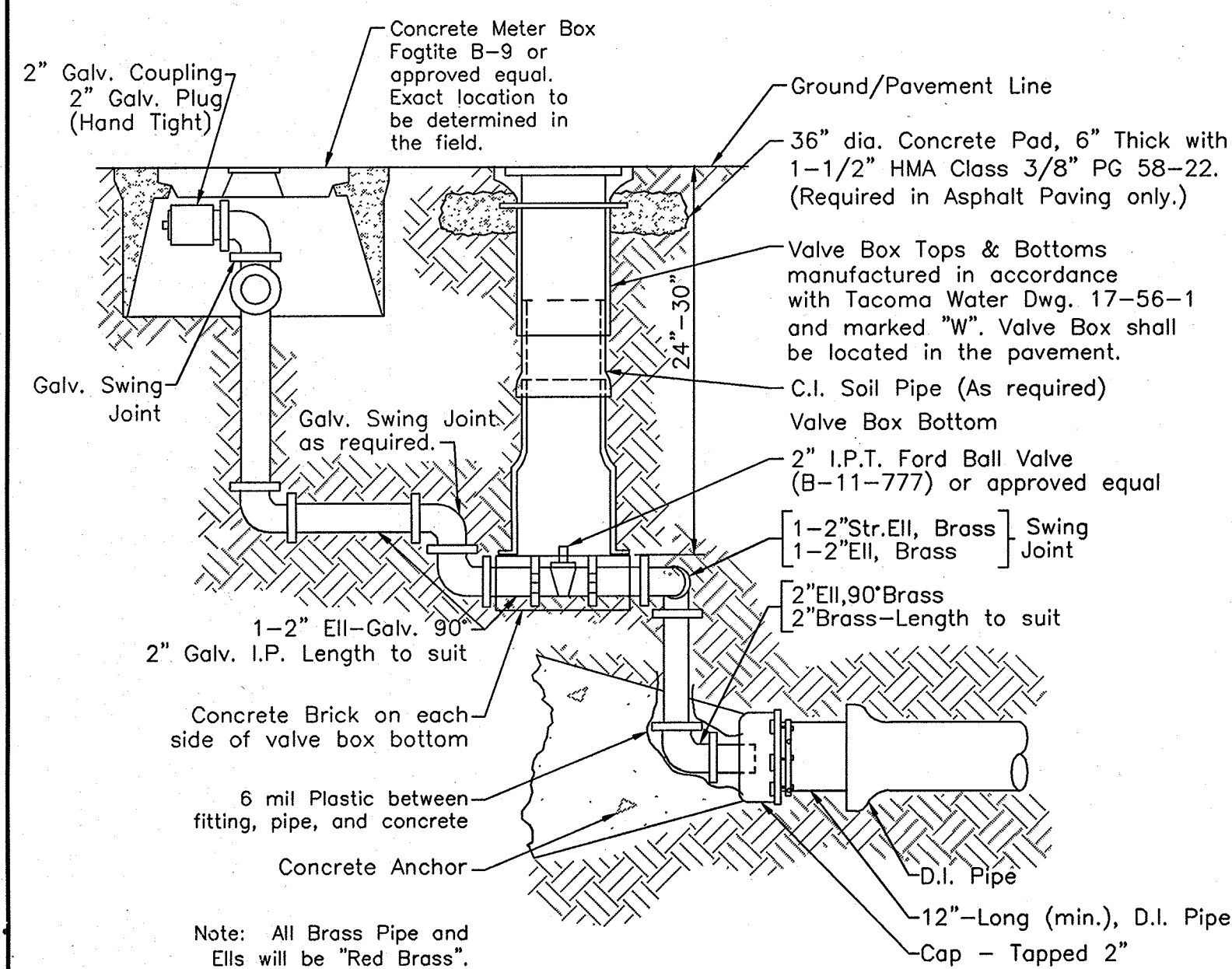
REFERENCE	
FIELD BOOK	MAP NO.



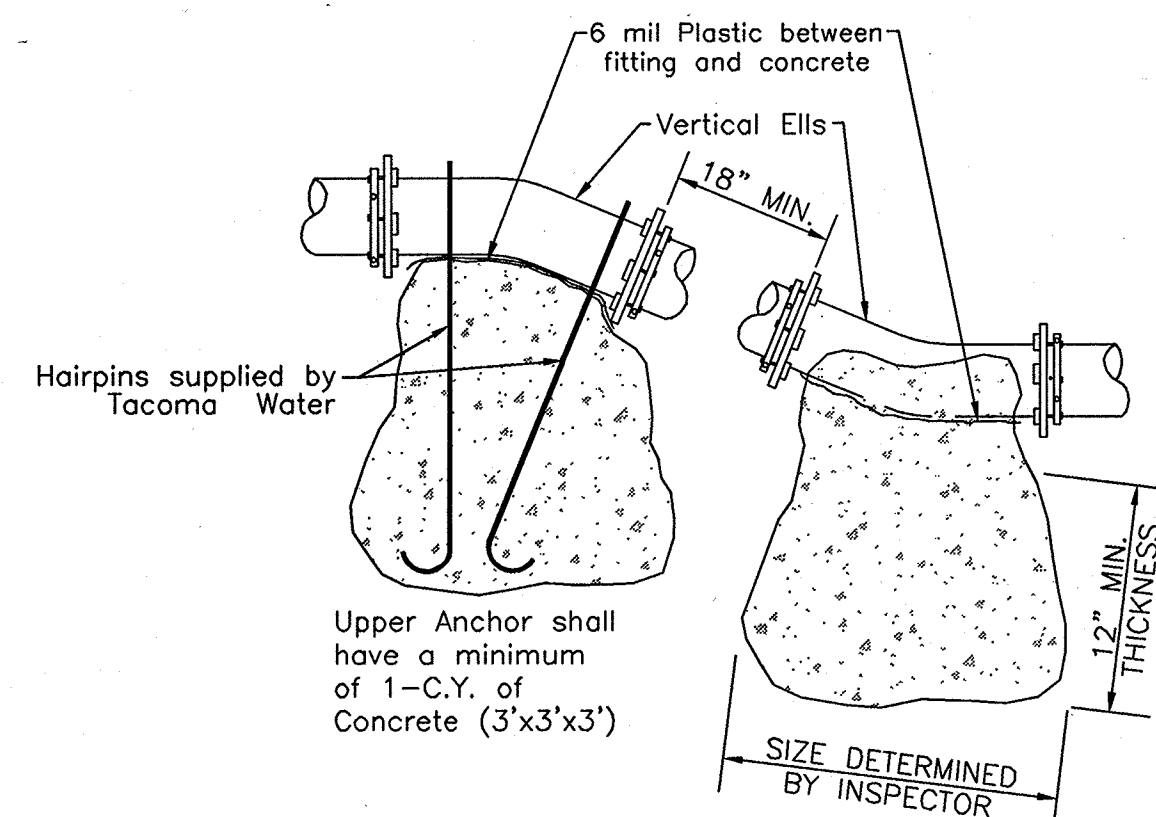
CITY OF TACOMA
DEPARTMENT OF PUBLIC UTILITIES
WATER DIVISION

STANDARD DETAILS

DATE <u>6-9-99</u>		APPROVED  DISTRIBUTION MANAGER		SCALE HORIZ: N/A VERT: N/A	
DESIGNED <u>J.J.A.</u>				DRAWING NO. 17-56-1	
DRAWN <u>STAFF</u>					
CHECKED _____					
WBS #	Surveying	Engineering	Inspection	SHEET <u>1</u> OF <u>2</u>	

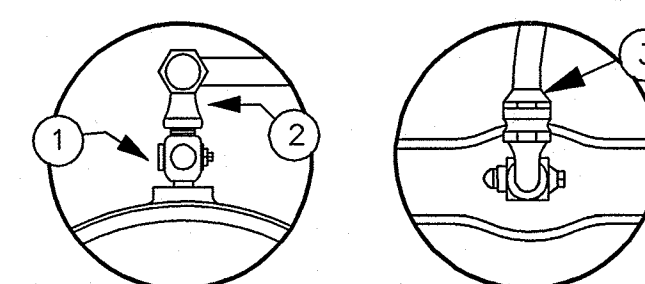


DETAIL OF 2" BLOW-OFF ASSEMBLY
Not to Scale

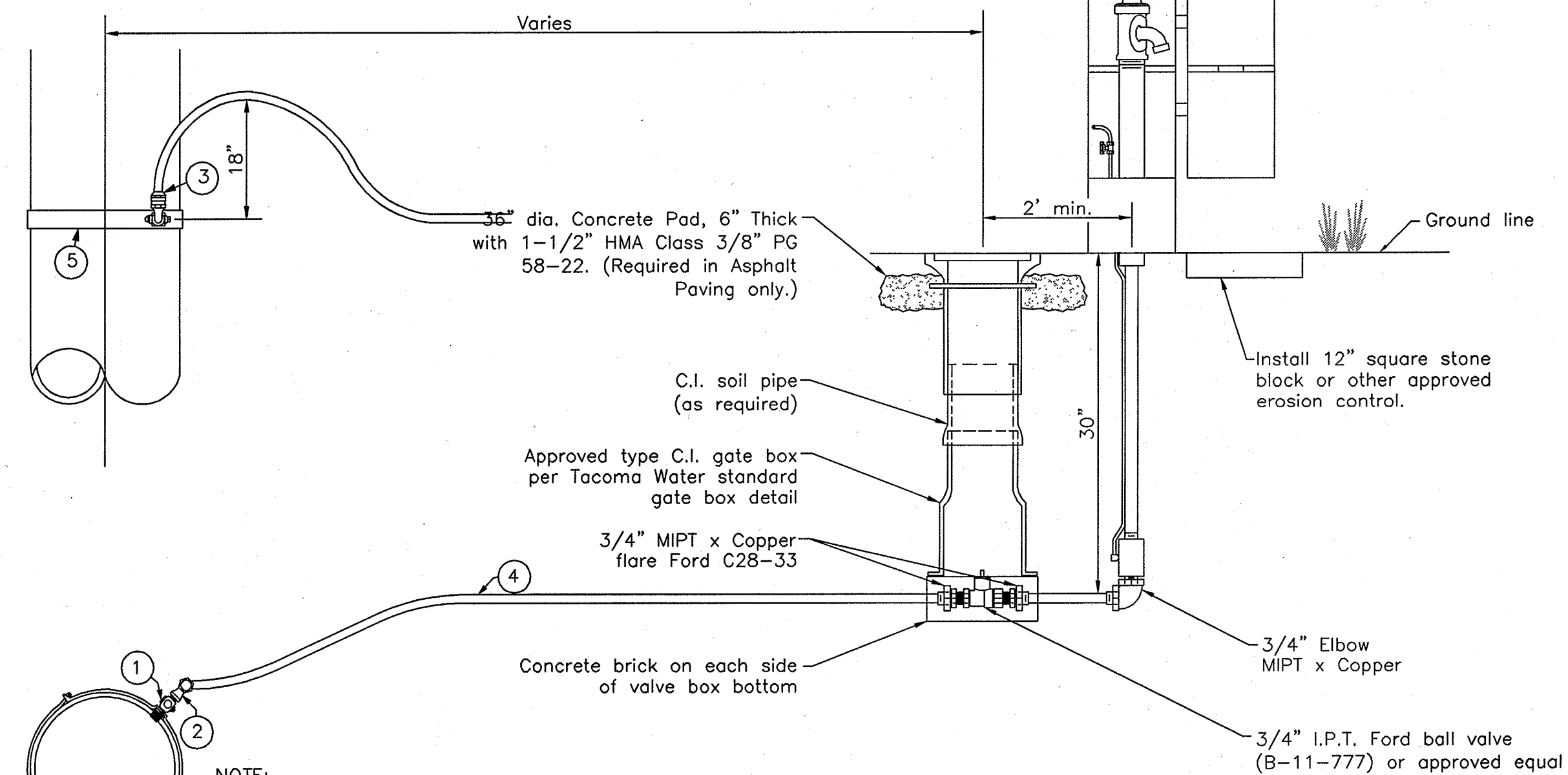


VERTICAL ELL W/CONCRETE ANCHOR
Not to Scale

- ① Corporation Stop.
AWWA thread (C.C./Mueller) inlet by Increased Male Iron Pipe outlet with internal driving thread.
Teflon Joint Compound on male threads.
Approved: A.Y. McDonald 3121; Ford F-800; Mueller H-10003.
- ② Quarter Bend Coupling.
1-inch Female Iron Pipe thread inlet by 3/4-inch copper flare thread.
Approved: A.Y. McDonald 4779; Ford L-12-43; Mueller H-15475.
- ③ Straight Coupling.
3/4-inch Female Copper Flare thread inlet by Compression connection, copper tube size O.D.
Internal Copper Friction Washer.
Approved: Mueller H-15071.
- ④ Copper Tubing.
3/4-inch, seamless, type "K", ASTM B-88.
- ⑤ Clamp, Service, Pipe diameter by 3/4-inch in CC outlet, Ductile Iron Body, Double Stainless Steel Straps, with 5/8-inch bolts, for service taps.
Approved: Ford, FS202-979XCC3; Robar, 2406X8X3/4"CCDS; Romac, 202SX9.62X3/4"CC; JMC, 404-0963/4"CC; Smith Blair, 317-101007-003.



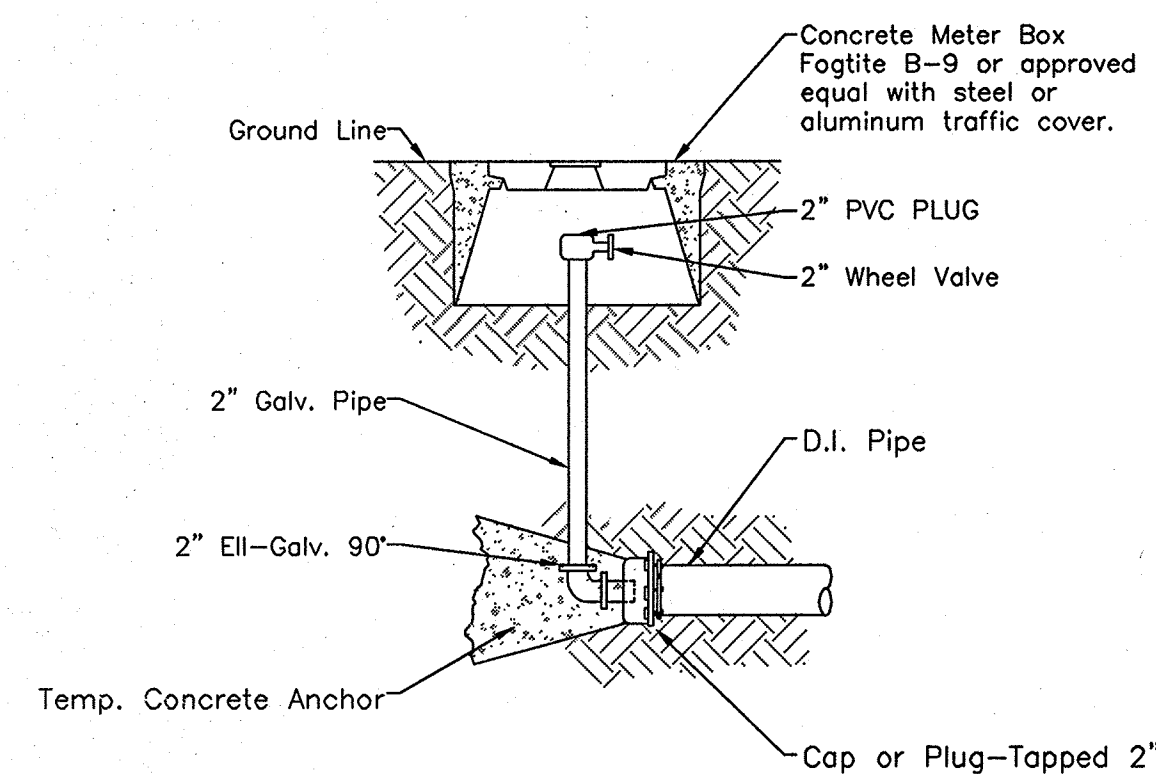
Fittings 1, 2, and 3 enlarged to show detail



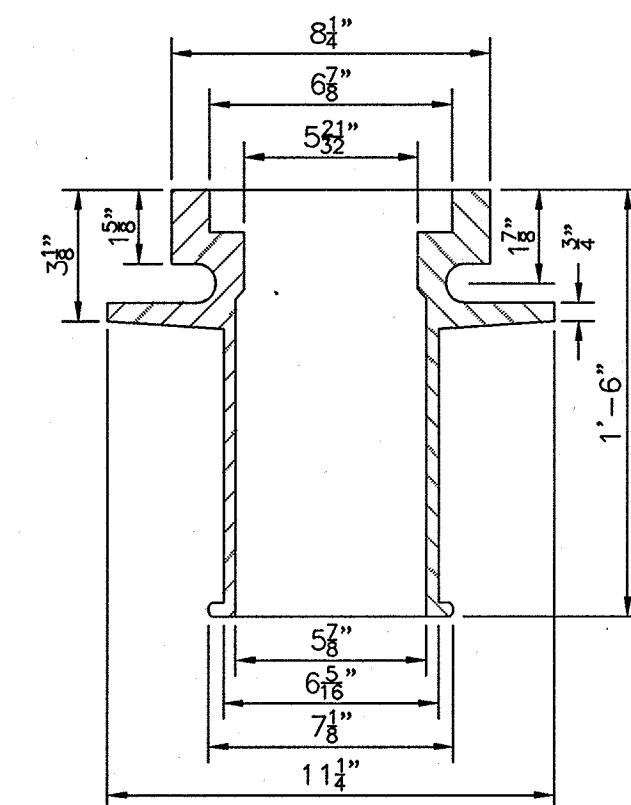
NOTE:

Water Service saddles must be used for all water service taps on ductile iron pipe 4-inch diameter or less and in cul de sacs on water mains 8-inch diameter or less.

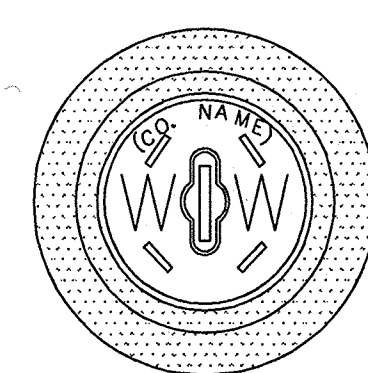
PERMANENT SAMPLING STATION
Not to Scale



TEMPORARY BLOW-OFF DETAIL
Not to Scale



STANDARD GATE BOX DETAIL
Not to Scale



ITEMS SHOWN
APPROXIMATE WEIGHT:
LID - 12#
TOP - 48#
BASE - 31#

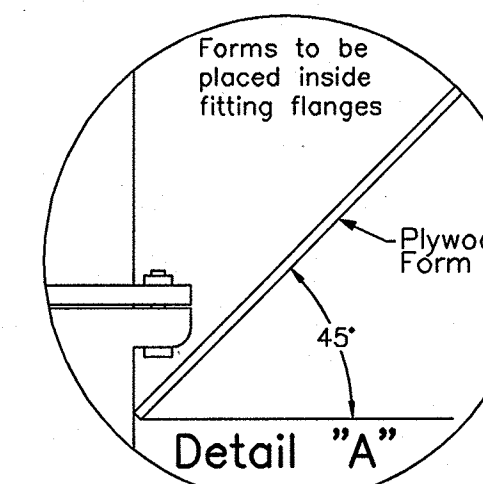
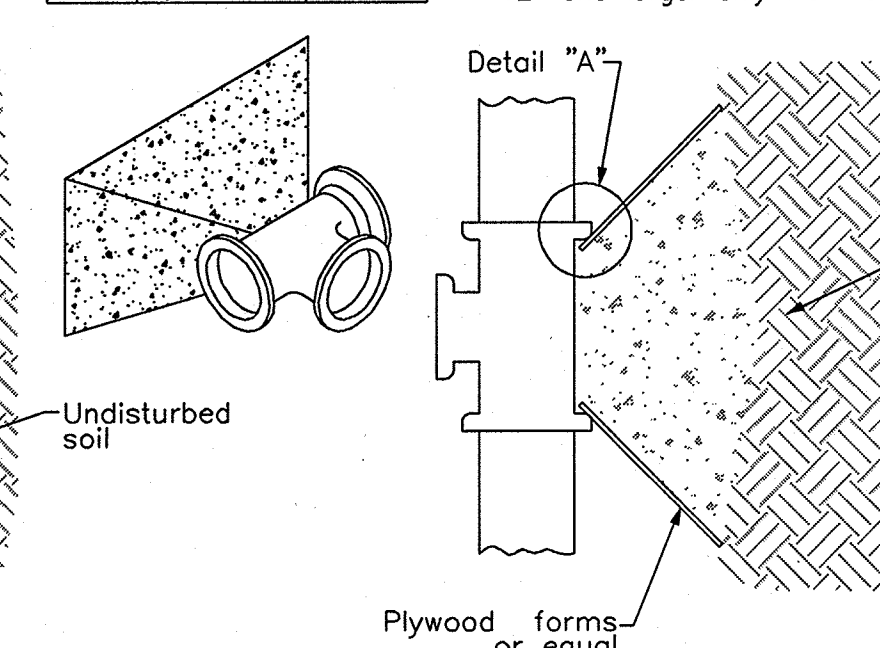
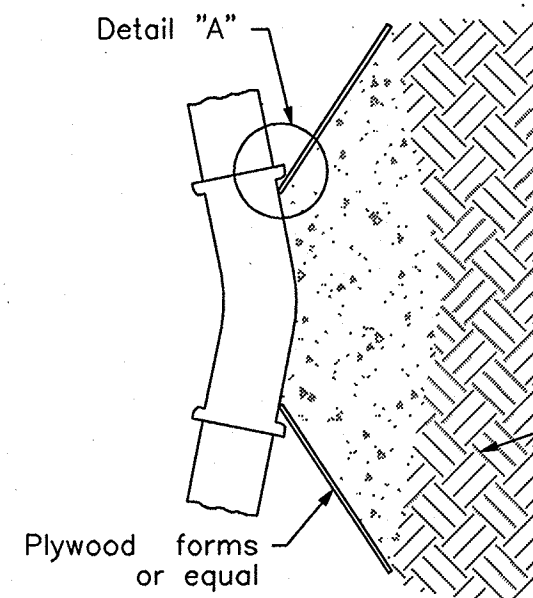
- NOTES:
1. Bases must be available 24" thru 42" in 6" increments.
 2. Lids must not rock when seated in the valve box top.
 3. Manufacturers name on all parts.
 4. 5% weight tolerance.
 5. The "W's" shall be 1-3/4" in height.
 6. Maximum tolerance from dimensions indicated is 1/16"±.

1 cubic yard = Approx. 61 bags of ready mix using 60# bags
1 60# bag = .44 cubic foot

MAIN SIZE	MINIMUM ANCHOR SIZE	NO. BAG
6"	1/4yd.*	15 Bags
8"	1/3yd.*	20 Bags
12"	3/4yd.*	N/A**
16"	1yd.*	N/A**

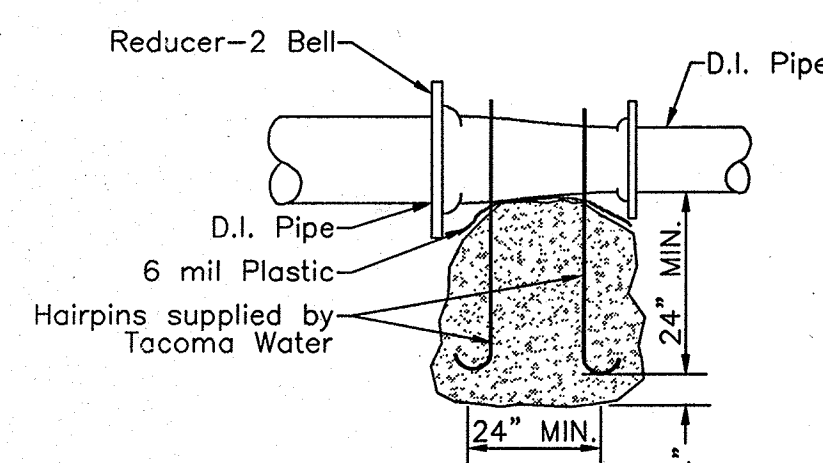
* The actual size shall be based on the soil bearing strength and appropriate safety factor based on DIPRA guidelines as determined by the inspector.

** 12" and larger only from batch plant.



All forms shall be approved by the inspector prior to placing concrete. All anchors to be approved prior to backfilling.

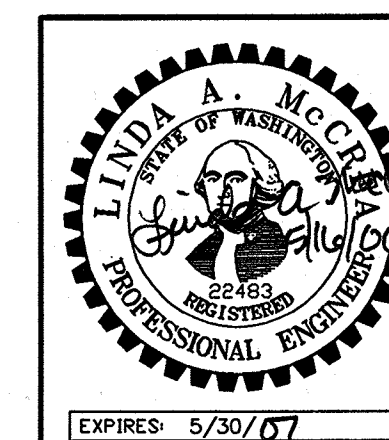
THRUST BLOCK DETAIL
Not to Scale



REDUCER W/CONCRETE ANCHOR
Not to Scale

TACOMA WATER
CITY OF TACOMA
DEPARTMENT OF PUBLIC UTILITIES
WATER DIVISION

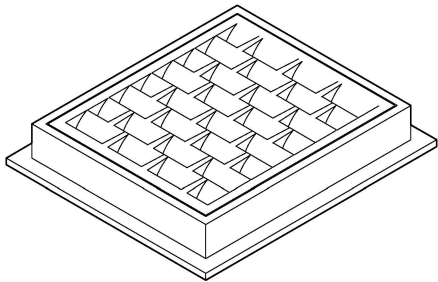
STANDARD DETAILS



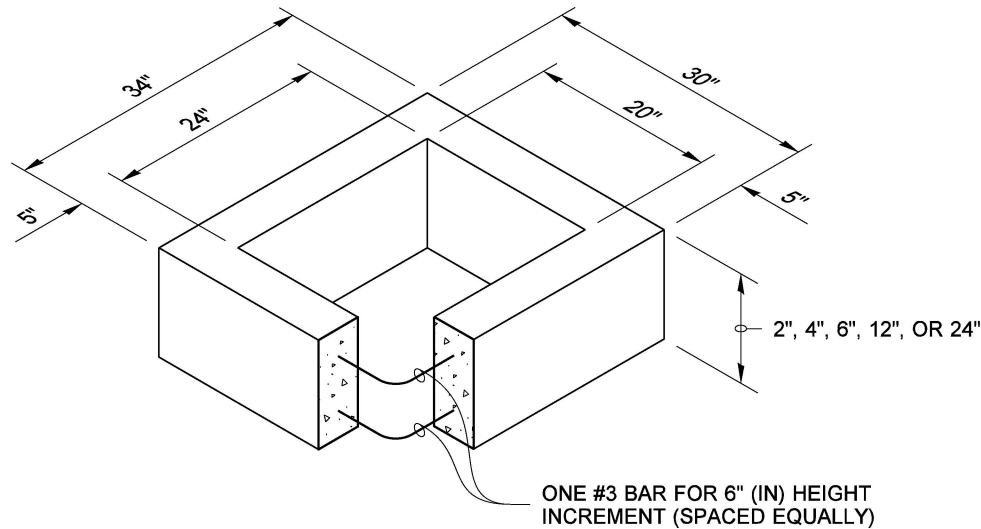
NO.	REVISION	DATE	BY	APP'D.
3	Add sheet 2	4/06	JJA	
2	Changed Fire Hydrant notes.	6/03	JJA	
1	Change Megalug note	4/01	JJA	HLP

REFERENCE	FIELD BOOK	MAP NO.

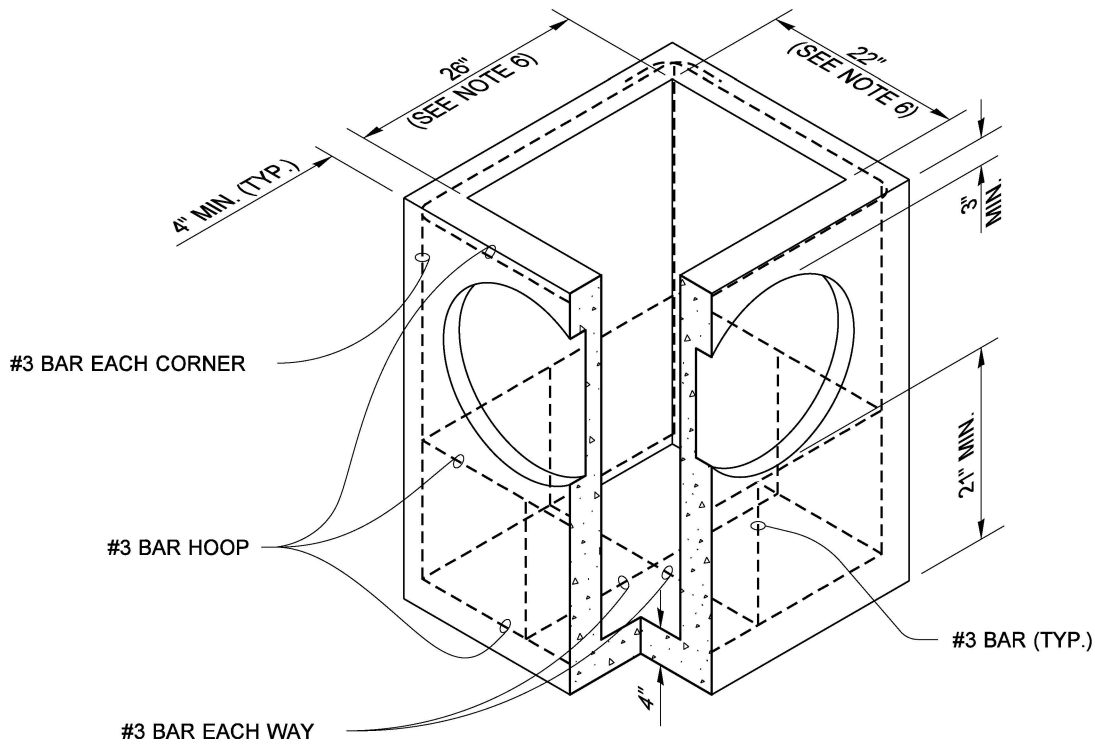
DATE	6-9-99	APPROVED	<i>Sunda McCrea</i> DISTRIBUTION MANAGER	SCALE	HORIZ: N/A VERT: N/A
DESIGNED	J.J.A.	DRAWN	STAFF	DRAWING NO.	17-56-1
CHECKED		WBS #	Surveying	Engineering	Inspection
					SHEET 2 OF 2



FRAME AND VANED GRATE



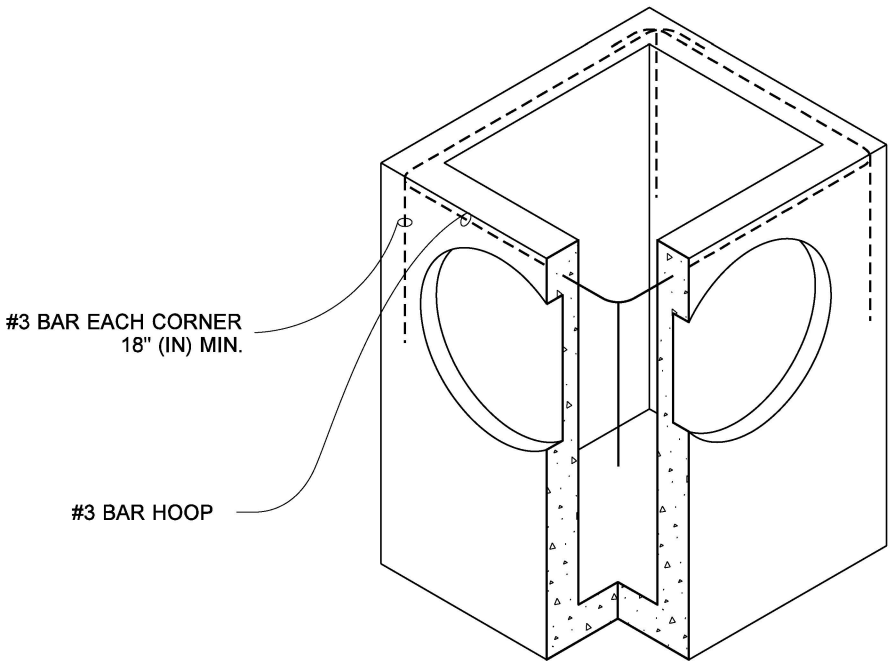
RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP * (STD. SPEC. SECT. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	15"

* CORRUGATED POLYETHYLENE STORM SEWER PIPE



(SEE NOTE 1)

ALTERNATIVE PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
6. The opening shall be measured at the top of the **Precast Base Section**.
7. All pickup holes shall be grouted full after the basin has been placed.



Julie Heilman
2020.09.01 07:52:50 -07'00'

CATCH BASIN TYPE 1

STANDARD PLAN B-5.20-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

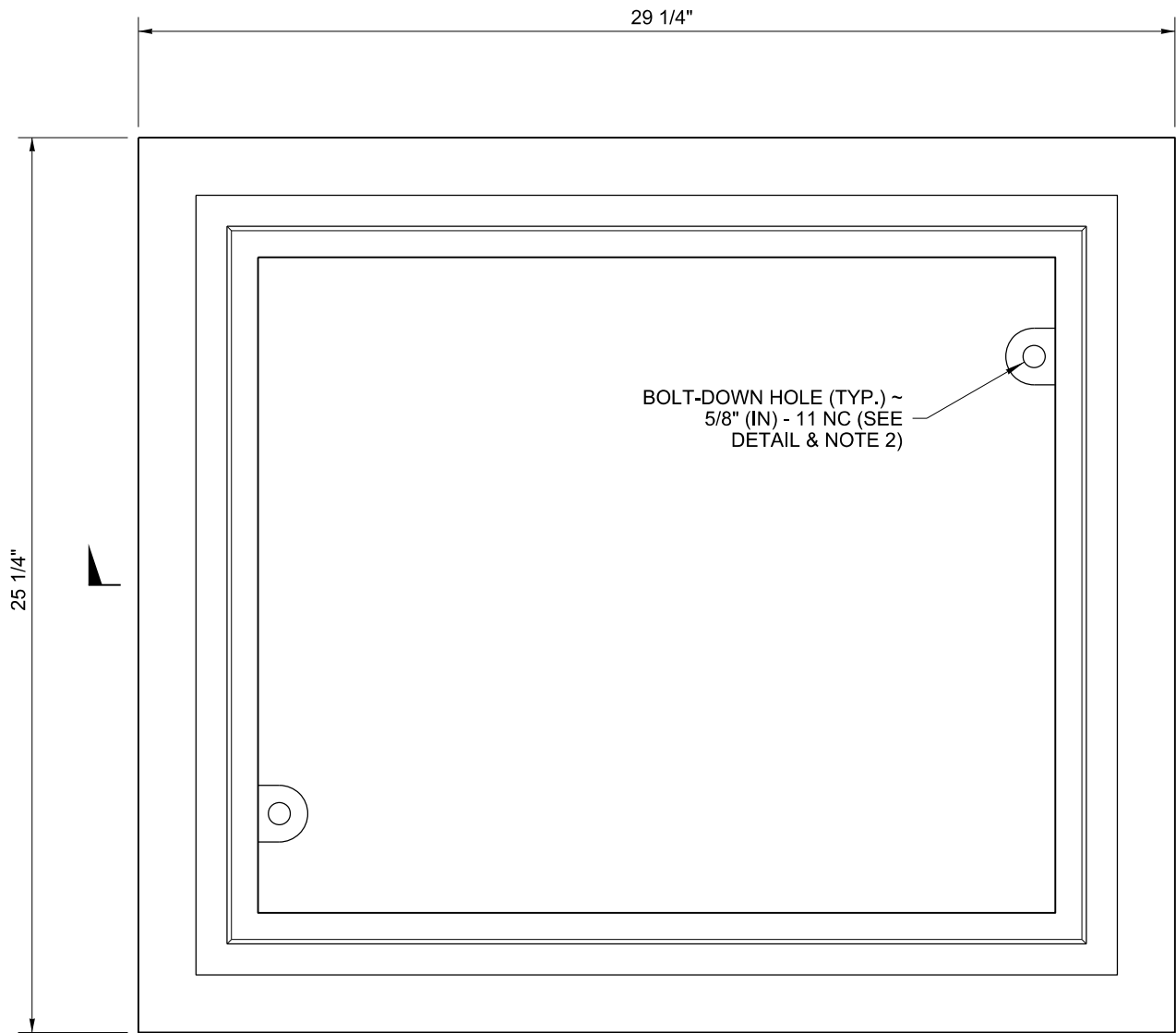
Roark, Steve

Digitally signed by Roark, Steve
Date: 2020.09.09 09:45:23 -07'00'

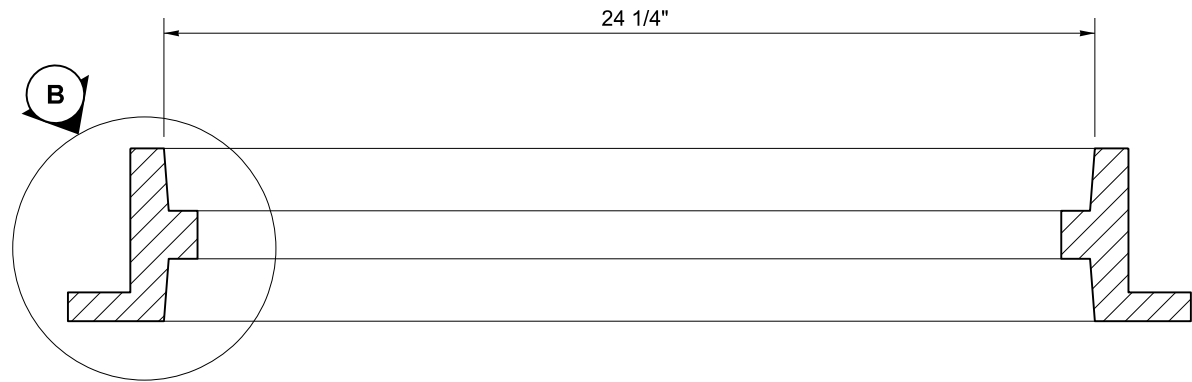
STATE DESIGN ENGINEER

Washington State Department of Transportation

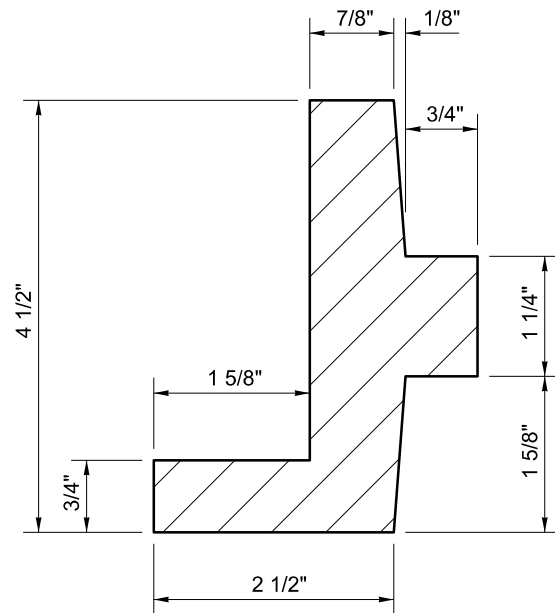
DRAWN BY: FERN LIDDELL



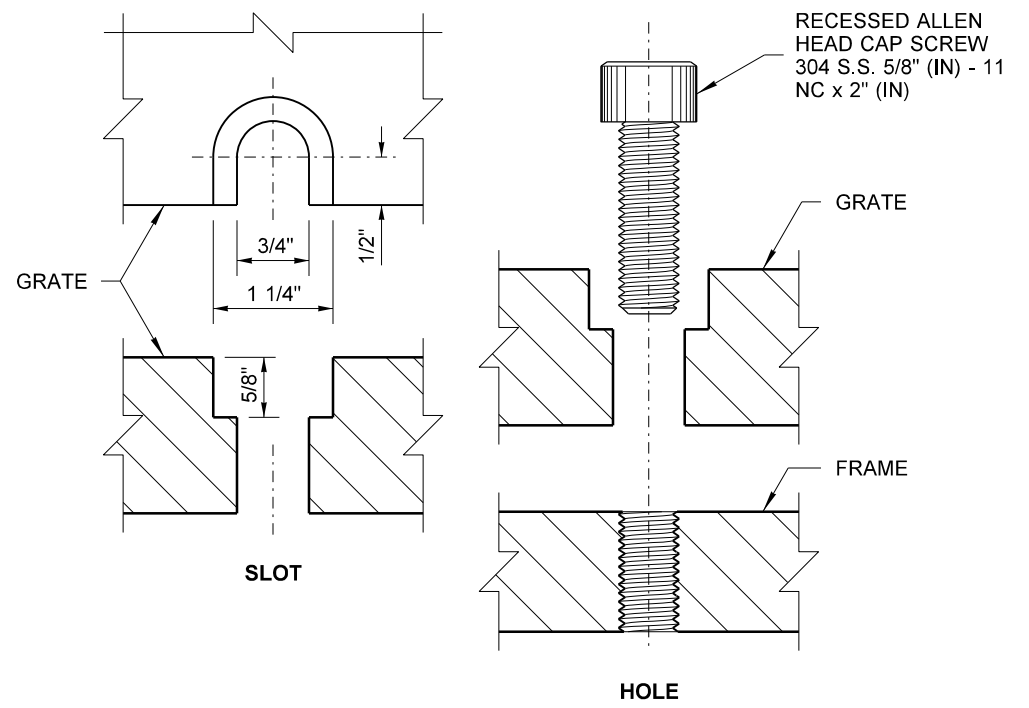
TOP



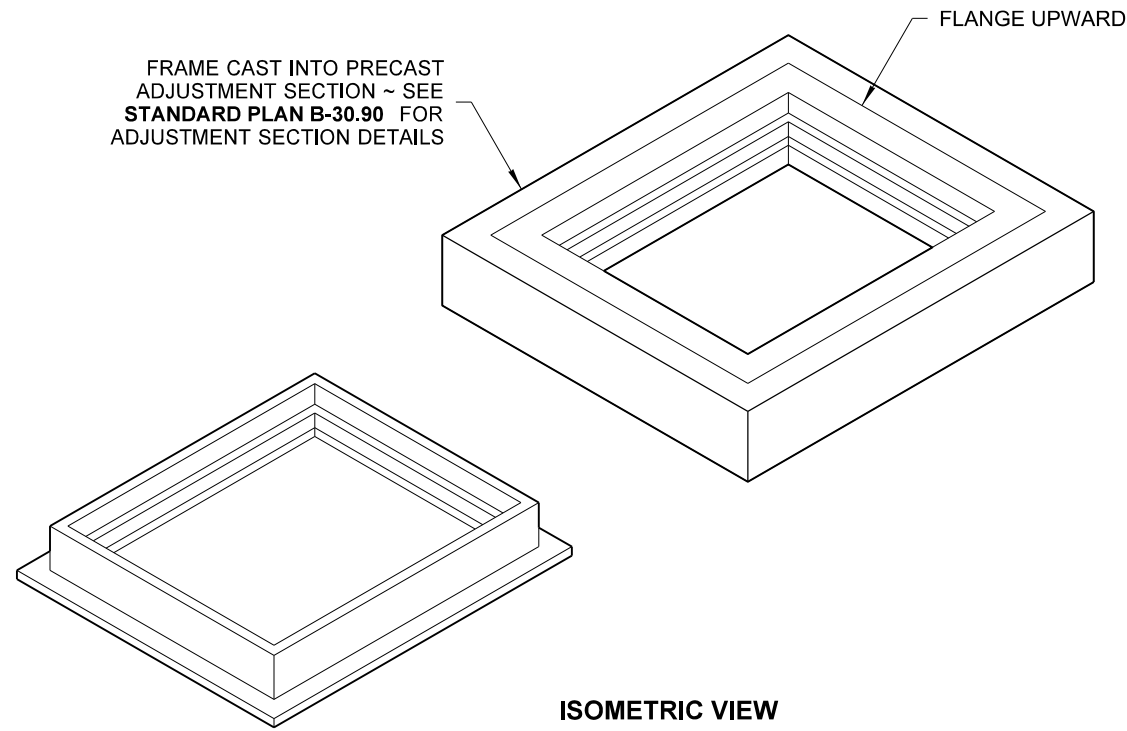
SECTION A



DETAIL B



BOLT-DOWN DETAILS
SEE NOTE 2



ISOMETRIC VIEW
SHOWING THE VARIATIONS

NOTES

1. This frame is designed to accommodate 20" (in) x 24" (in) grates or covers as shown on **Standard Plans B-30.20, B-30.30, B-30.40, and B-30.50.**
2. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
3. Refer to **Standard Specification Section 9-05.15** and **9-05.15(2)** for additional requirements.



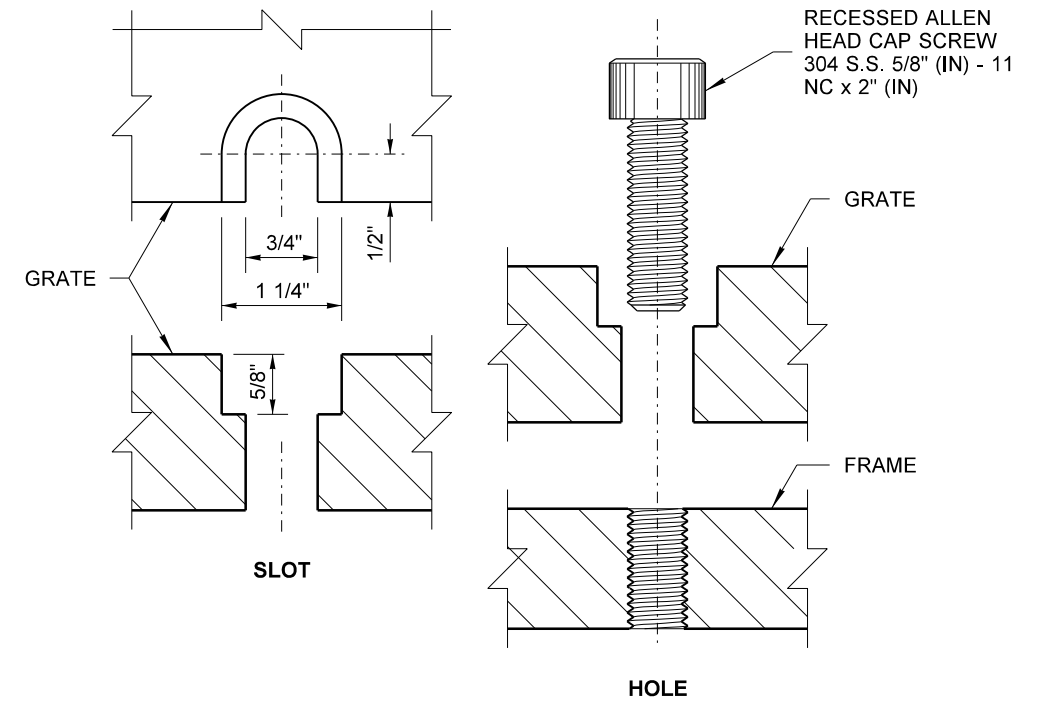
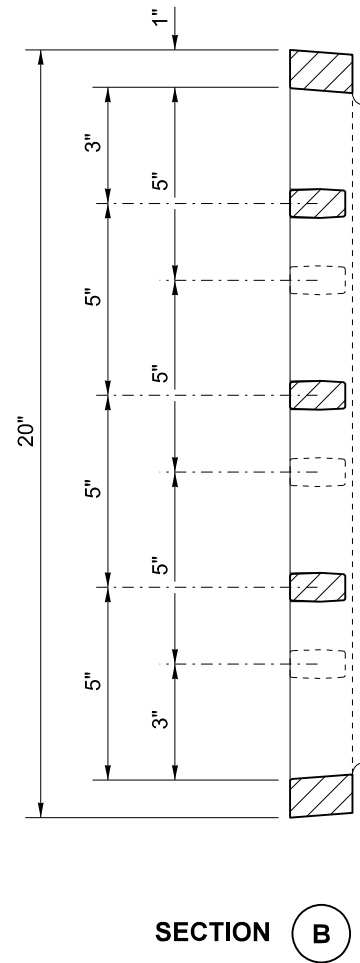
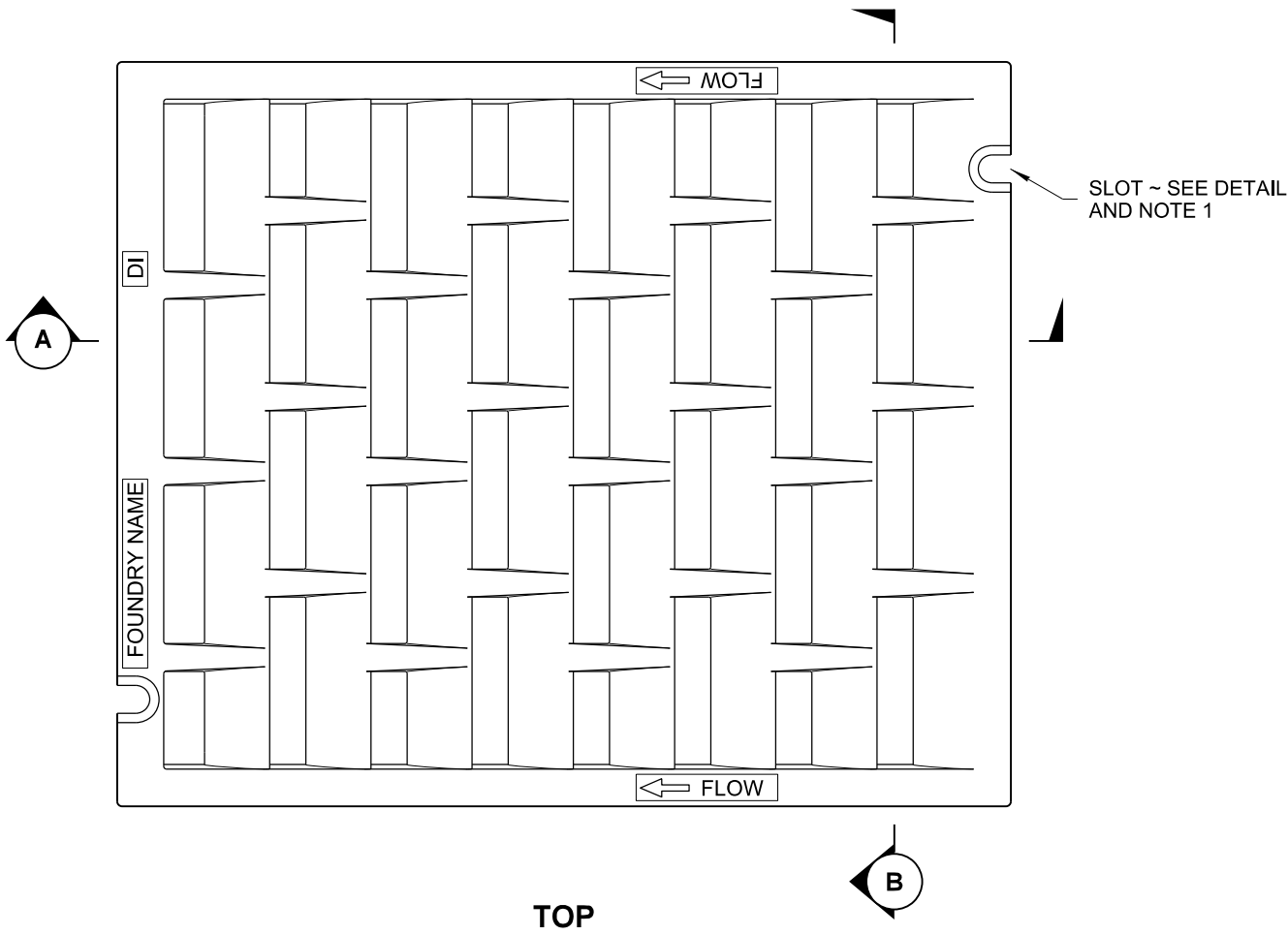
**RECTANGULAR FRAME
(REVERSIBLE)**
STANDARD PLAN B-30.10-03

SHEET 1 OF 1 SHEET

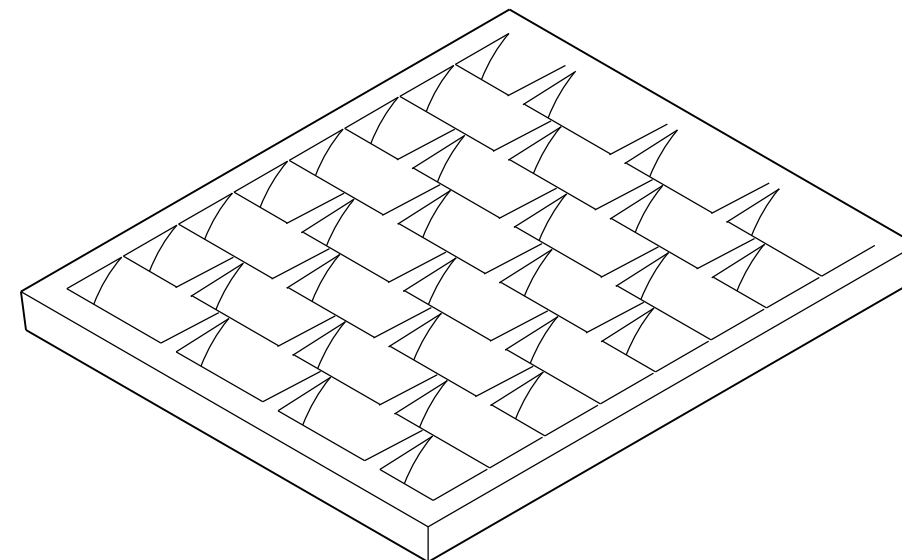
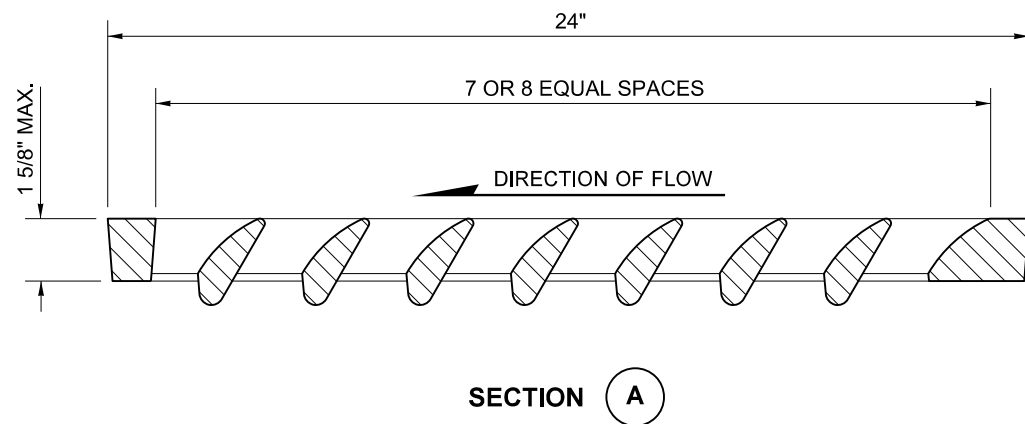
APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



BOLT-DOWN DETAILS
SEE NOTE 1



ISOMETRIC

NOTES

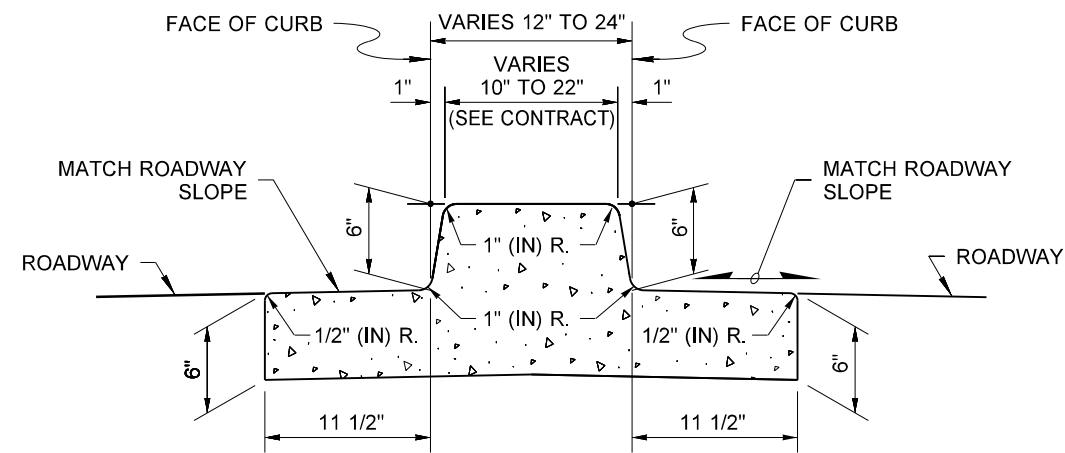
1. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
2. Refer to **Standard Specification Section 9-05.15** and **9-05.15(2)** for additional requirements.
3. For frame details, see **Standard Plan B-30.10**.



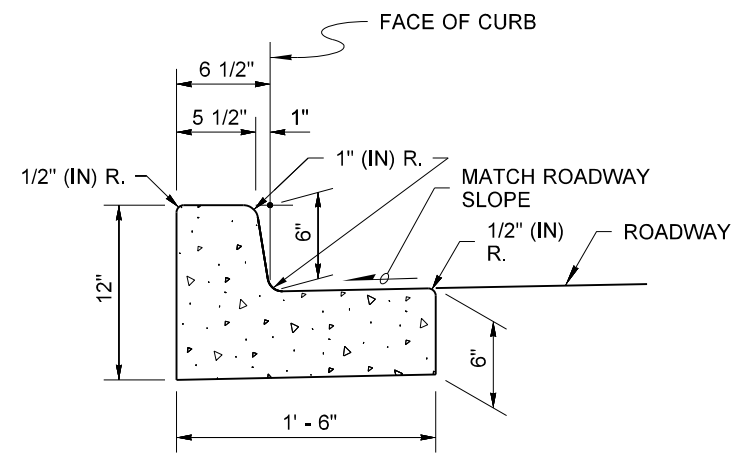
RECTANGULAR VANED GRATE STANDARD PLAN B-30.30-03

SHEET 1 OF 1 SHEET

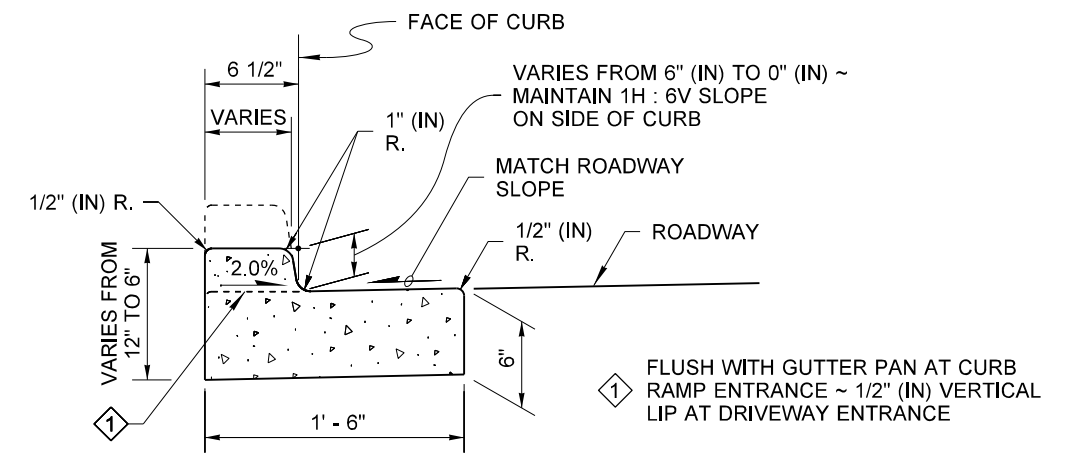
APPROVED FOR PUBLICATION



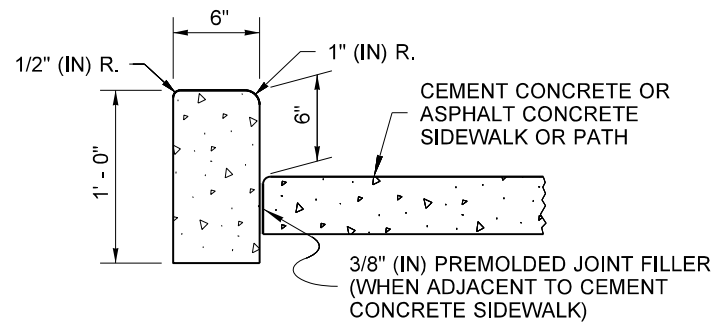
DUAL-FACED CEMENT CONCRETE TRAFFIC CURB AND GUTTER



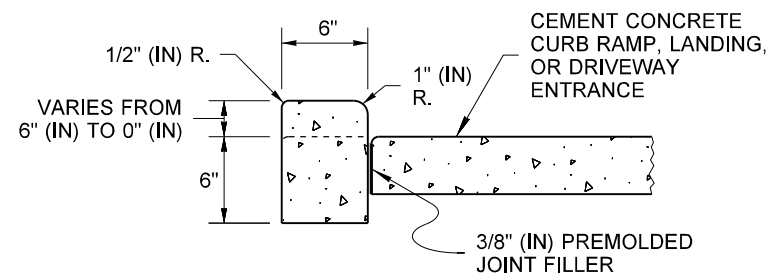
CEMENT CONCRETE TRAFFIC CURB AND GUTTER



**DEPRESSED CURB AND GUTTER SECTION
AT CURB RAMPS AND
DRIVEWAY ENTRANCES**



CEMENT CONCRETE PEDESTRIAN CURB

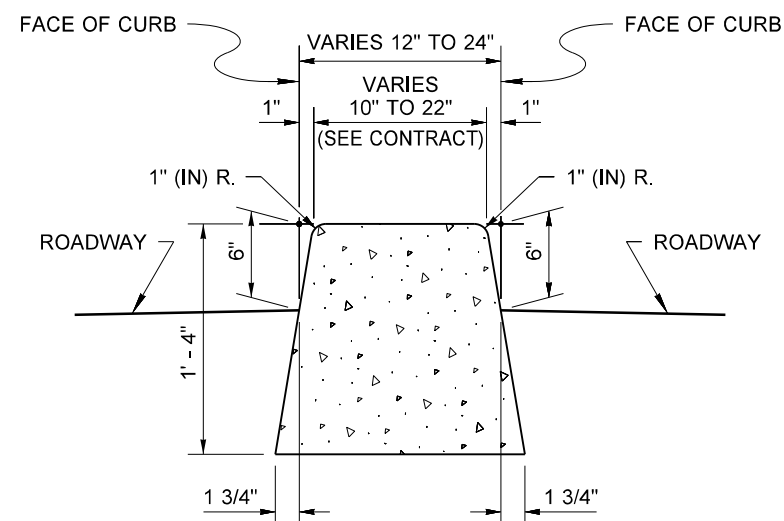


CEMENT CONCRETE PEDESTRIAN CURB

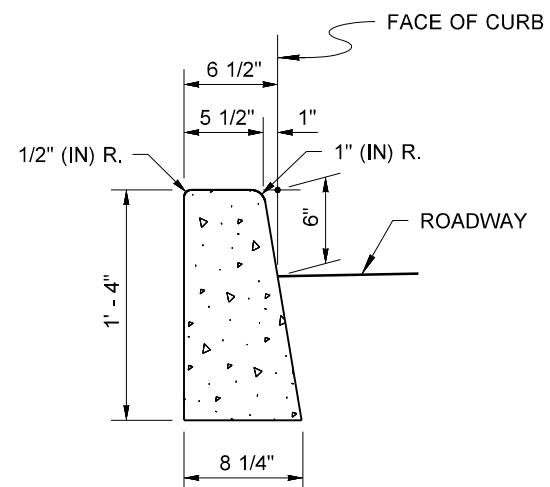
AT CURB RAMPS, LANDINGS, AND DRIVEWAY ENTRANCES

NOTE

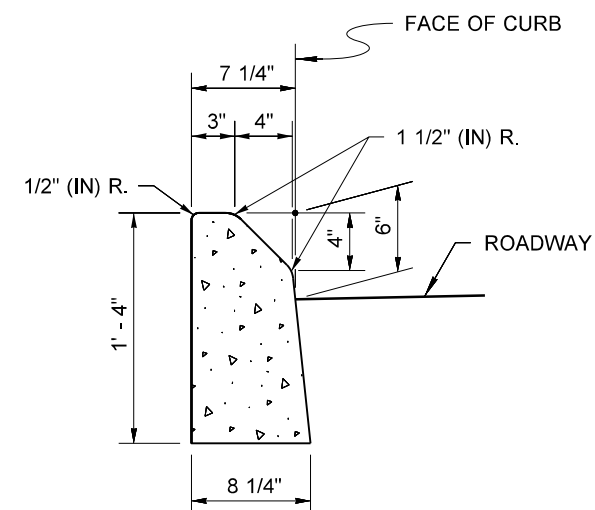
1. See **Standard Plan F-30.10** for Curb Expansion and Contraction Joint spacing. See **Standard Specification, Sections 8-04 and 9-04** for additional requirements.



DUAL-FACED CEMENT CONCRETE TRAFFIC CURB



CEMENT CONCRETE TRAFFIC CURB



**MOUNTABLE CEMENT
CONCRETE TRAFFIC CURB**



Michael S
Fleming
CEMENT CONCRETE CURBS

Digitally signed by Michael S
Fleming
Date: 2020.09.24 07:39:38 -07'00'

STANDARD PLAN F-10.12-04

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Date: 2020.09.24

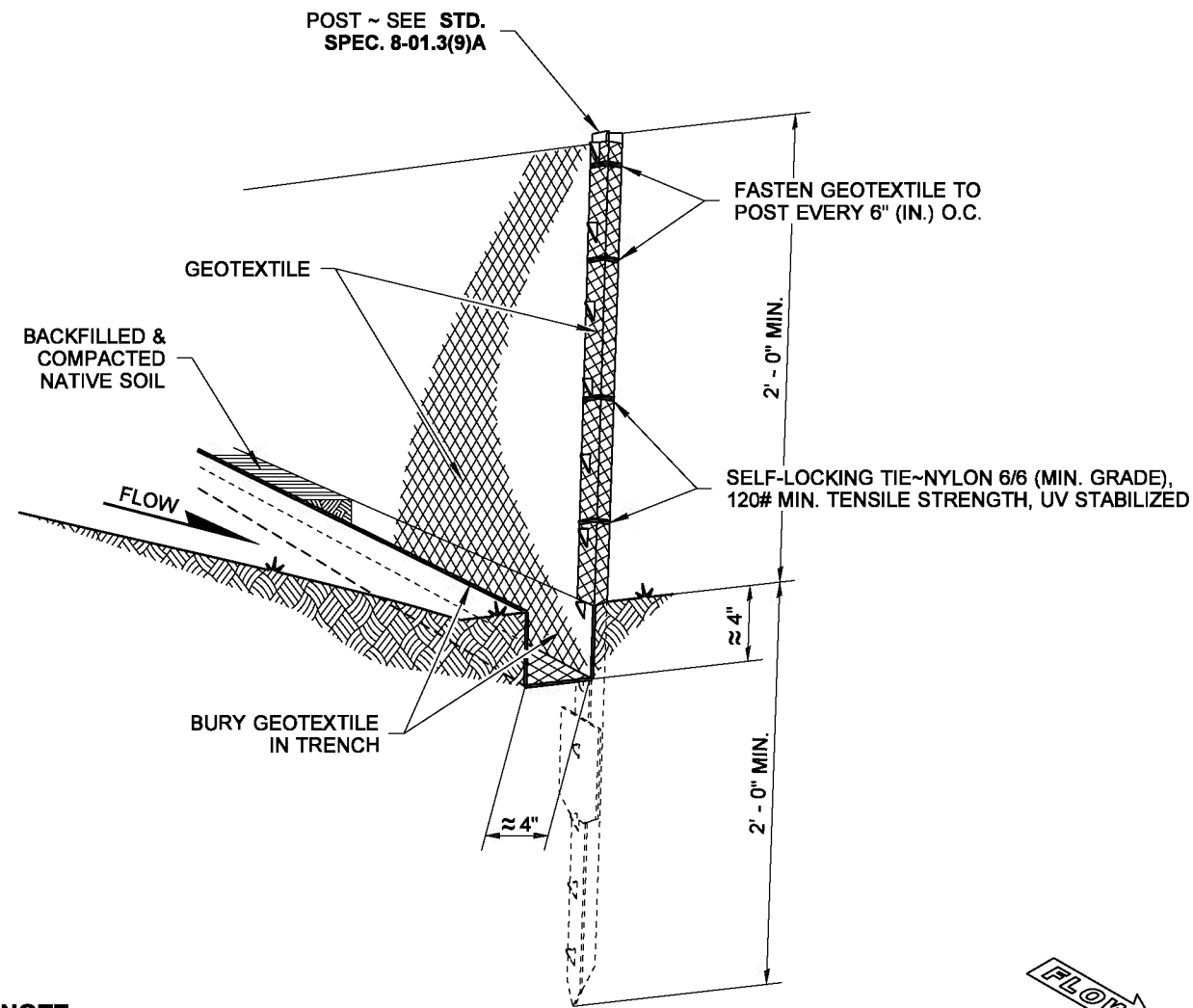
07:57:43 -07'00'

STATE DESIGN ENGINEER



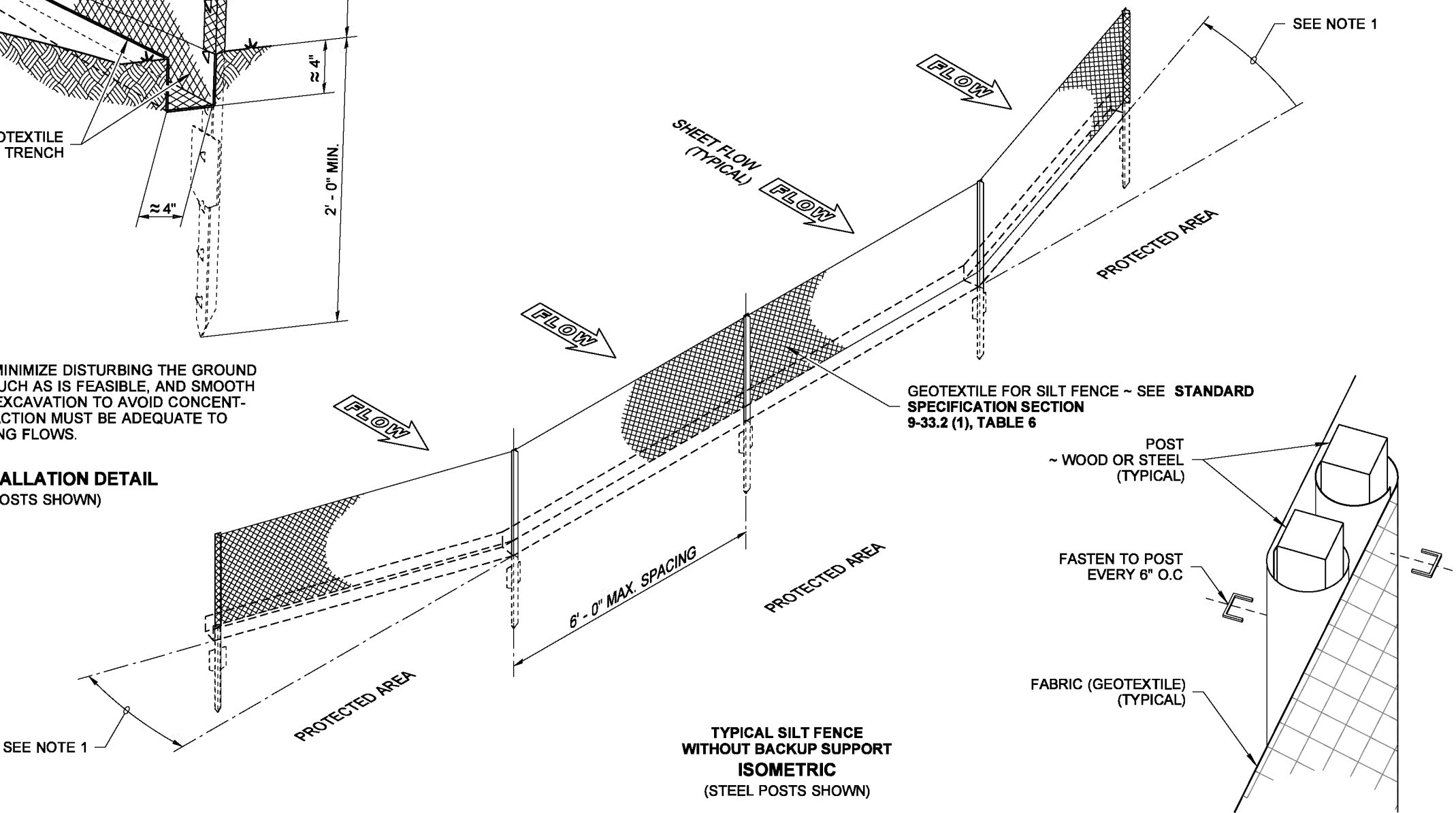
Washington State Department of Transportation

DRAWN BY: BILL BERENS

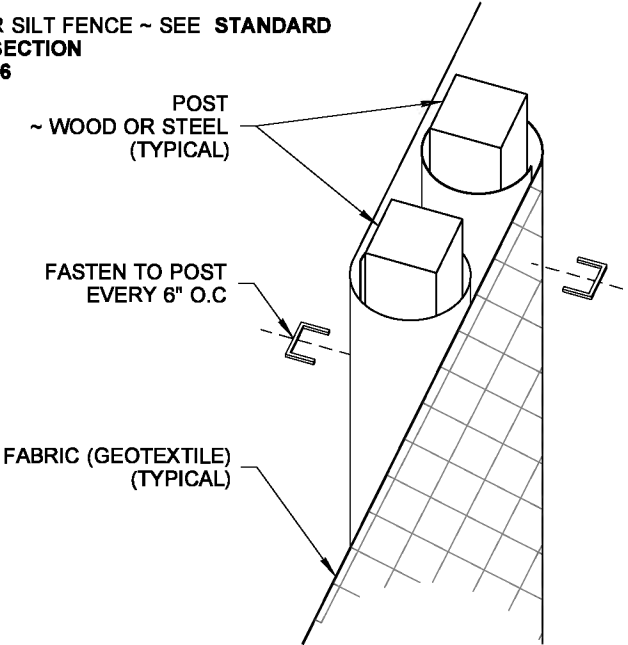


NOTE
DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENT-RATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

TYPICAL INSTALLATION DETAIL
(STEEL POSTS SHOWN)



TYPICAL SILT FENCE WITHOUT BACKUP SUPPORT ISOMETRIC
(STEEL POSTS SHOWN)

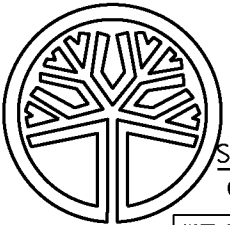


SPLICED FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP.

SPLICE DETAIL
(WOOD POSTS SHOWN)

NOTES

1. Install the ends of the silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence.
2. Perform maintenance in accordance with **Standard Specifications 8-01.3(9)A and 8-01.3(15)**.
3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
4. Install silt fencing parallel to mapped contour lines.



NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

SILT FENCE

STANDARD PLAN I-30.15-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III

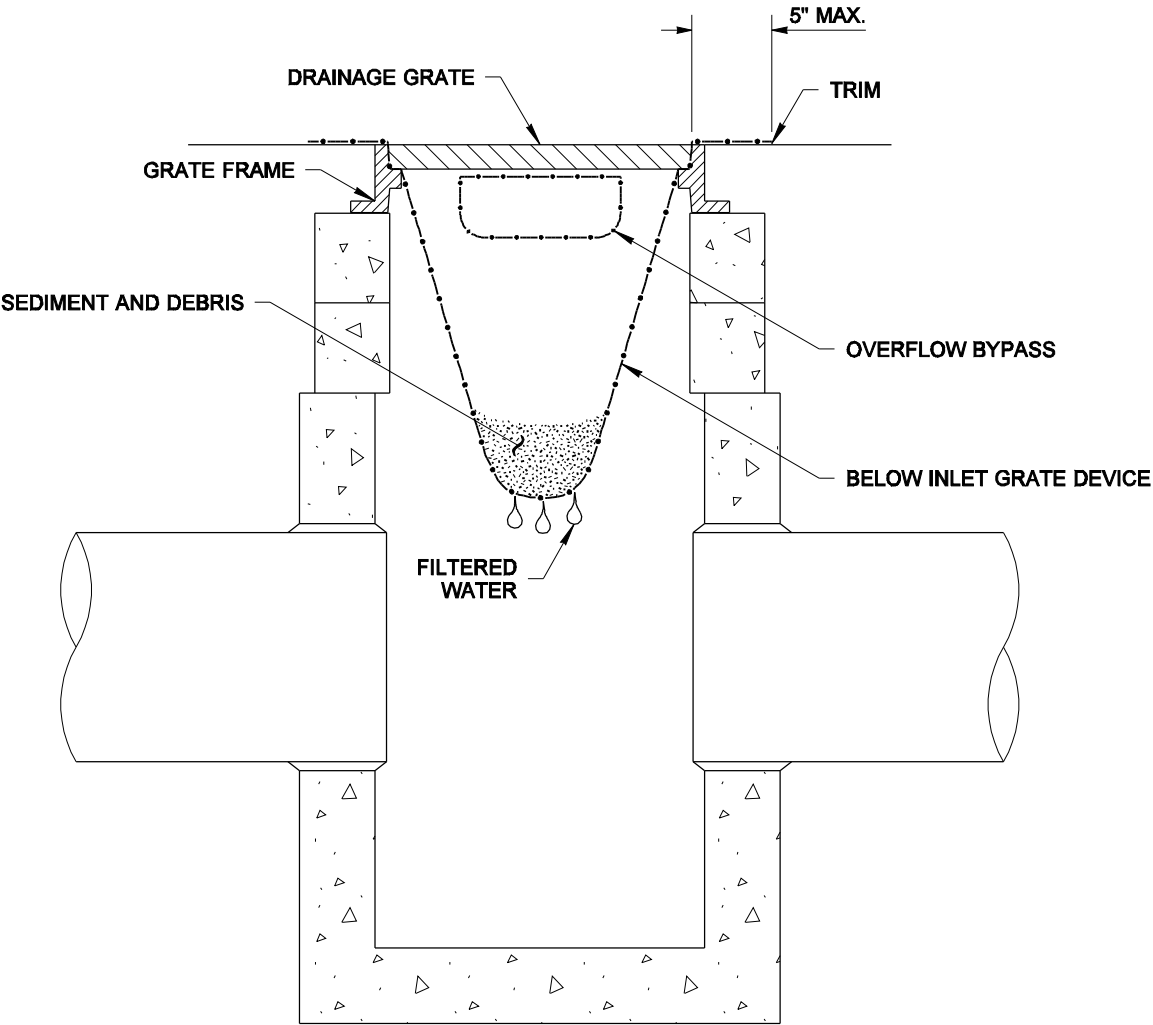
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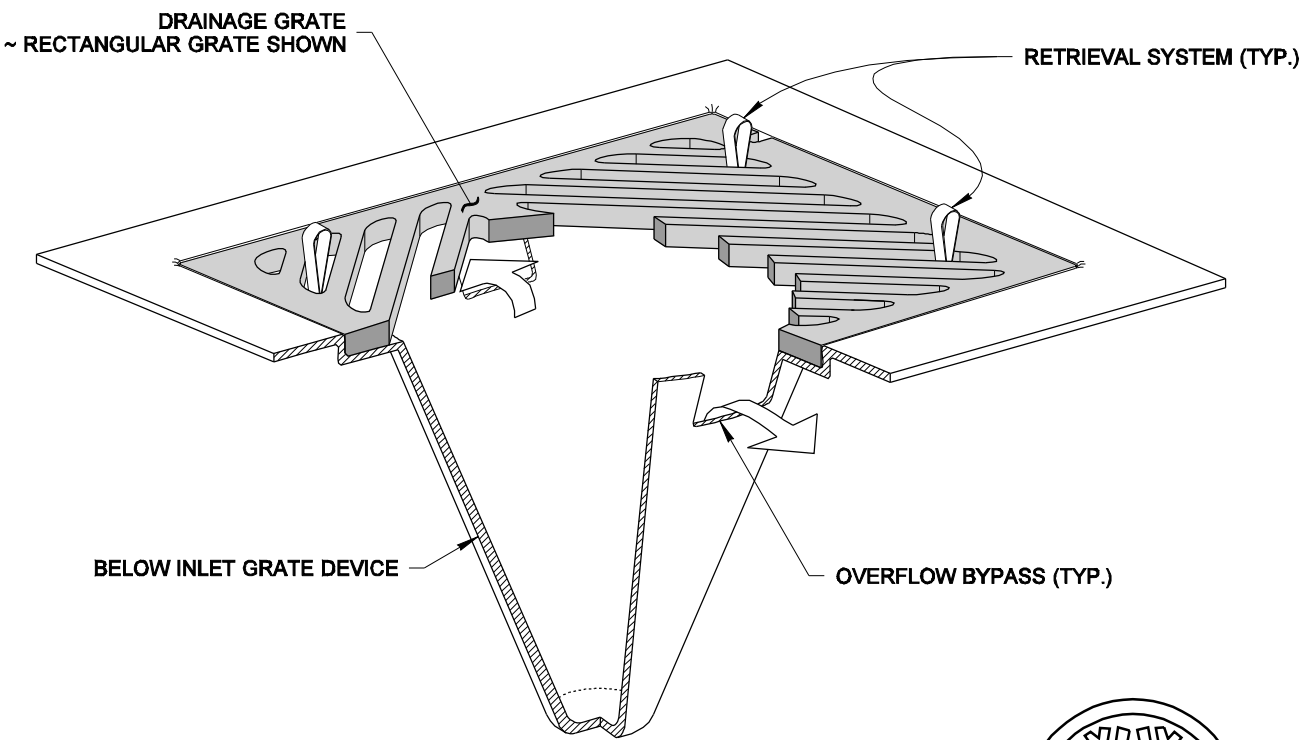
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Washington State Department of Transportation



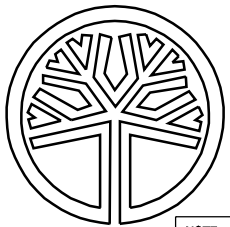
SECTION VIEW
NOT TO SCALE



ISOMETRIC VIEW

NOTES

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



STATE OF
WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

MARK W. MAURER
CERTIFICATE NO. 000598

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

**STORM DRAIN
INLET PROTECTION
STANDARD PLAN I-40.20-00**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III **09-20-07**

STATE DESIGN ENGINEER

DATE



Washington State Department of Transportation

APPENDIX B

SUMMARY OF GEOTECHNICAL CONDITIONS



REPORT OF GEOTECHNICAL ENGINEERING SERVICES

City of Tacoma
WW Sewer Replacement, South J Street
Tacoma, Washington

For
KPG, P.S.
July 27, 2021

GeoDesign Project: KPG-128-01



July 27, 2021

KPG, P.S.
2502 Jefferson Avenue
Tacoma, WA 98402

Attention: Nate Mozer, P.E.

Report of Geotechnical Engineering Services
City of Tacoma
WW Sewer Replacement, South J Street
Tacoma, Washington
GeoDesign Project: KPG-128-01

GeoDesign, Inc. is pleased to submit this report of geotechnical engineering services to support the WW Sewer Replacement, South J Street project in Tacoma, Washington. This report has been prepared in accordance with our proposal dated April 20, 2020.

We appreciate the opportunity to be of service to you. Please contact us if you have questions regarding this report.

Sincerely,

GeoDesign, Inc.

Kevin J. Lamb, P.E.
Principal Engineer

JTW:KJL:kt

Attachments

One copy submitted (via email only)

Document ID: KPG-128-01-072721-geor.docx

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ACRONYMS AND ABBREVIATIONS

AC	asphaltic concrete
ASTM	American Society for Testing and Materials
BGS	below ground surface
OSHA	Occupational Safety and Health Administration
PCC	portland cement concrete
pcf	pounds per cubic foot
ppm	parts per million
psi	pounds per square inch
psf	pounds per square foot
SPT	standard penetration test
WSS	Washington Standard Specifications for Road, Bridge, and Municipal Construction (2020)

1.0 INTRODUCTION

GeoDesign, Inc. is pleased to provide this geotechnical report for the WW Sewer Replacement, South J Street project in Tacoma, Washington. The location of the site relative to surrounding physical features is shown on Figure 1. The project includes replacement of the existing sewer at the following locations:

- South I Street between Division Avenue and South 7th Street (approximately 2,048 feet)
- South 7th Street between South I Street and South J Street (approximately 400 feet)
- South J Street between South 7th Street and South 12th Street (approximately 1,875 feet)
- South 12th Street between South J Street and the alley to the west (approximately 160 feet)

Acronyms and abbreviations used herein are defined above, immediately following the Table of Contents.

2.0 PURPOSE AND SCOPE OF SERVICES

The purpose of this study was to gather and review available subsurface information, evaluate subsurface conditions, and provide geotechnical conclusions and engineering recommendations to support utility installation. Our scope of services included a site reconnaissance, borings, laboratory testing, and engineering analyses to develop the geotechnical conclusions and recommendations presented in this report. Specifically, we performed the following:

- Collected and reviewed readily available geotechnical and geologic data for the project area.
- Drilled six borings to depths between 16 and 16.5 feet BGS at locations shown on Figures 2 through 4.
- Completed geotechnical laboratory analyses on select disturbed soil samples collected from the explorations to determine certain index properties of the on-site soil.
- Performed engineering analysis and evaluated data derived from the subsurface explorations and prepared this report.

3.0 SITE CONDITIONS

The project area extends along South I Street from Division Avenue to South 7th Street, along South 7th Street from South I Street to South J Street, along South J Street from South 7th Street to South 12th Street, and along South 12th Street between South J Street and the alley located approximately 160 feet to the west (Figure 2 through 4). The project includes replacing the sanitary sewer alignment described above. Site conditions were observed during visits to the site to mark the proposed boring locations and during drilling of the subsurface explorations.

The project area is within the Tacoma Smelter plume area where estimated concentrations of lead and arsenic in near-surface soil are less than 20 ppm. According to the document titled *Soil Management Plan; Tacoma Smelter Plume and Commercial/Industrial Testing Requirements; Tacoma, Washington*, dated March 29, 2016 (Tacoma, 2016), special sampling for arsenic and lead is not required if expected concentrations are less than 20 ppm.

3.1 SURFACE CONDITIONS

The project area is located on the upland area south of Commencement Bay. The ground surface generally slopes down gradually to the north toward Commencement Bay with a change in elevation of approximately 52 feet from South 12th Street to the north end of the project at Division Avenue.

The project area is within the Downtown Regional Growth Center area on the City of Tacoma Future Land Use Map dated March 2, 2020. Adjacent to the right-of-way the area is generally developed with single-family residential, multi-family residential, and light commercial. Wright Park is located directly east of the north end of the project alignment.

The street segments within the project area are generally paved with AC in fair condition. PCC curbs with planter strips and PCC sidewalks are present on both sides of the road in most areas along the project alignment. Along South I Street, in the vicinity of Wright Park, PCC sidewalks are only present on the west side of the roadway.

3.2 SUBSURFACE CONDITIONS

Subsurface conditions at the site were evaluated through a review of existing subsurface information and by completing geotechnical explorations. We drilled six borings within the project area at the locations shown on Figures 2 through 4. The borings were generally located in the northbound lane where the new sanitary sewer alignment will likely be installed based on correspondence with KPG. Exceptions to this are as follows:

- Boring B-3, which was completed at the dead-end portion of South I Street on the north end of the on street parking lot
- Boring B-1, which was re-located to the center of the roadway due to utility conflicts along both travel lanes

The borings were completed using hollow-stem auger drilling techniques to depths between 16 and 16.5 feet BGS. A description of our field exploration and laboratory testing programs, our exploration logs, and the results of our laboratory testing are presented in the Appendix.

Subsurface conditions encountered in the explorations are generally consistent with the mapped geology. The surficial materials include fill and disturbed native soil likely associated with past grading activities. Beneath the AC pavement, a slab of concrete pavement was encountered at all boring locations. The materials encountered below the surficial AC and concrete includes fill, recessional outwash deposits, and glacial till.

The materials encountered in the explorations are described below.

3.2.1 Existing Pavement

All borings were completed within existing paved areas, as shown on Figures 2 through 4. Below the AC we encountered PCC pavement at all locations. Aggregate base was not observed below the PCC at our exploration locations. The thickness of the AC and PCC pavement is summarized in Table 1.

Table 1. Pavement Section at Exploration Locations

Boring	Location	AC Pavement Thickness (inches)	PCC Pavement Thickness (inches)
B-1	South I Street	6.5	7.5
B-2	South I Street	6.5	7.5
B-3	South I Street	6	7
B-4	South J Street	5.5	6.5
B-5	South J Street	5.5	7.5
B-6	South J Street	6	6

3.2.2 Fill

Fill is present at the boring locations below the AC and PCC pavement extending to depths between 3.5 to 7 feet BGS. The fill generally varies in composition from silty sand with variable amounts of gravel to sandy silt with gravel. Based on SPT blow counts, the silty sand fill varies from very loose to medium dense and the sandy silt fill is generally stiff.

3.2.3 Recessional Outwash

Recessional outwash is present beneath the fill at borings B-4 and B-6 to depths of 7.5 and 12 feet BGS, respectively. Recessional outwash was observed in boring B-5 below the fill to the maximum depth explored of 16.5 feet BGS.

The recessional deposits generally consist of layers of sandy silt, silty sand with variable amounts of gravel, sand with silt, and silty gravel with sand. The sand and silty sand are generally medium dense and contains variable amounts of gravel. The sandy silt observed in boring B-6 is very stiff.

3.2.4 Glacial Till

Glacial till is present beneath the fill or recessional outwash at all boring locations, except for B-5. It typically consists of a heterogeneous mixture of silty sand with gravel to sandy silt. Cobbles are present throughout the glacial till. The glacial till is typically dense to very dense (silty sand and silty gravel) based on blow count data.

3.3 GROUNDWATER

Groundwater was not observed during our explorations to the maximum depth explored of 16.5 feet BGS. We reviewed publicly available logs of borings completed in the general project area.¹ Logs of the available borings completed in the project vicinity extend to depths of up to 30 feet BGS and do not indicate a static groundwater table within the depths explored.

Zones of perched water may be encountered during construction near the contact between the fill or recessional outwash and underlying dense glacial till deposits as commonly observed in the local area.

¹ <https://fortress.wa.gov/ecy/wellconstruction/map/WCLWebMap/WellConstructionMapSearch.aspx>

4.0 GEOTECHNICAL LABORATORY TESTING

Laboratory testing for geotechnical purposes was conducted on specific soil samples collected from the explorations to assist in the characterization of certain physical parameters of the soil. Index tests that were performed included the determination of natural water content, grain-size distribution, and percent fines content. All testing was conducted in general accordance with appropriate ASTM standards (ASTM, 2020). A discussion of laboratory test methodology is presented in the Appendix. Test results are also displayed where appropriate on the exploration logs in the Appendix.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 GENERAL

Based on the development history of the site and the results of our explorations, laboratory testing, and analyses, it is our opinion that the proposed improvements are feasible using open trench construction methods with regards to geotechnical conditions.

- Groundwater was not encountered in our explorations to the maximum depth explored of 16.5 feet BGS. Based on our explorations, significant groundwater seepage is not anticipated during excavations for new utilities. However, based on soil conditions, zones of perched water may be present during periods of wet weather. We anticipate shallow sumps within the excavation will be suitable for managing the flow of perched water, if encountered at most locations.
- The very loose to loose, silty sand fill will be highly susceptible to sloughing and raveling in open trench excavations, and the medium dense recessional outwash will be moderately prone to sloughing and raveling; shielding or shoring will be required.
- Temporary trench shoring consisting of trench box shielding along with steel plates is anticipated for trench construction. An equivalent fluid density of 35 pcf is recommended for shoring design.
- The existing AC pavement along the project alignment varies from 5.5 to 6.5 inches and is underlain by 6 to 7.5 inches of PCC pavement. The existing subgrade adjacent to the utility trench should provide adequate support for pavement rehabilitation.
- The project area is located in the Tacoma Smelter plume, where predicted arsenic concentrations are less than 20 ppm. Special handling of soil is not anticipated to be necessary.
- Based on the anticipated pipe invert elevation of less than 15 feet BGS, significant dewatering is not anticipated for this project.

Our specific recommendations to support design efforts are presented in the following sections. We recommend incorporating these recommendations into the project design and that they be implemented during construction.

5.2 UTILITIES

5.2.1 General

Anticipated trench depths to install the new sanitary sewer are expected to be less than 15 feet BGS throughout the project alignment based on project correspondence. Based on our

explorations, we anticipate soil encountered during excavation will consist primarily of silty sand, sandy silt, sand with silt, and silty gravel. The fill and recessional outwash deposits will tend to ravel and slough during excavation activities. Temporary sidewall support will be required to maintain trench sidewalls and prevent the width of the excavation from growing. Where excavations exceed a depth of 4 feet BGS, temporary sidewall support will be required. The glacial till material is generally dense to very dense and should stand vertical with minimal raveling.

Cobbles were encountered in the recessional outwash and glacial till deposits. Boulders, although not observed in our explorations, are occasionally encountered in the native soil deposits in the area. If the new utility alignment is the same as the existing alignment, we do not anticipate boulder obstructions. If excavations are contained within the original sewer pipe trench, we estimate a low probability of encountering boulders in the trench excavations. Excavations that extend outside or beyond the original sanitary sewer trench alignment may encounter large cobbles and boulders within the recessional outwash or glacial till material.

5.2.2 Pipe Foundation Support

Soil conditions at the pipe invert elevation are expected to vary from medium dense recessional outwash (silty sand to silty gravel) to dense to very dense glacial till (silty sand with gravel). At most locations the anticipated materials will provide adequate pipe support and over-excavation is not generally anticipated. If shallower utilities are installed within the fill material (depths less than 7 feet BGS), over-excavation and stabilization of the trench subgrade material will be necessary to provide adequate pipe support.

Soft or loose zones encountered within the pipe trench can be mitigated by over-excavation and in accordance with WSS 7-08.3(1)A - Trenches. The over-excavation should extend to firm material or a maximum depth of 1 foot below the pipe bedding. Pipe bedding material should then be placed up to the bottom of the trench and compacted to a dense and unyielding condition.

Over-excavation activities should be at the direction of the City of Tacoma (City) and/or their construction representative. Over-excavation should be completed with a smooth-bladed bucket to reduce soil disturbance at the base of the excavation.

5.2.3 Soil Parameters for Pipeline Design

The soil load that will be imposed on a buried pipe is dependent on soil and groundwater conditions, the type of pipe, the width of the trench, the height of bedding material around the pipe, the depth of cover over the pipe, the method of pipe placement, and backfill conditions. Recommended trench backfill soil parameters for evaluating soil overburden loads are provided below:

- Dry soil density of 120 pcf
- Moist soil density of 130 pcf
- Soil friction angle of 34 degrees
- Soil to clay pipe friction angle of 26 degrees

The soil load factor to be used in estimating pipe deflections using the modulus of soil reaction (E') should be calculated based on the prism load, which is the weight of a column of soil over a unit length of the pipe with a width equal to the pipe diameter and a height equal to the cover over the top of the pipe.

The modulus of soil reaction (E') is used in the Reclamation Equation not the Iowa Formula for estimating vertical pipe deflections (Howard, 1977 and 2006). We anticipate that the trench width will be approximately 4 feet or at least 3 pipe diameters and that the backfill material and the degree of compaction of the backfill will be consistent with the report recommendations. The existing soil encountered in the borings is typically medium dense to very dense at the anticipated pipe embedment depths. The native soil adjacent to the trench will not greatly affect deflections based on the width of the City's standard trench; a composite E' value of 3,500 psi is recommended for use in the Reclamation Equation for estimating pipe deflections (Howard, 2006).

5.2.4 Pipe Bedding and Backfill

In accordance with City of Tacoma Standard Plan SU-16, we recommend providing a bedding layer of at least 6 inches thick to provide a stable working surface for establishing proper grades and installing the pipe. The pipe zone bedding material should also be used to cover the top of the pipe a minimum of 6 inches in accordance with the City of Tacoma Standard Plan SU-16. The pipe zone bedding material should consist of crushed surfacing top course (WSS 9-03.9(3) – Crushed Surfacing Base Course).

Pipe zone backfill should also consist of bedding material and should be brought up evenly around the pipe and extend at least 6 inches above the crown of the pipe. During placement it should be manually worked under the haunches of the pipe by slicing with a shovel, vibration, or other approved procedures.

Utility trenches should be backfilled with structural fill as defined in the "Fill Materials" section and in accordance with WSS 7-08.3(3) – Backfilling. The on-site soil may to be suitable for use as fill material, although moisture conditioning should be anticipated.

Backfilling of trenches should be in accordance with the requirements of WSS 7-08.3(3) – Backfilling. Trench backfill should be placed in 12-inch-thick layers and compacted to a relative density of at least 95 percent of the maximum dry density (ASTM D1557). The initial lift of trench fill over the top of the pipe should be approximately 24 inches thick and compacted to a firm condition. Successive lifts should meet the minimum compaction criteria.

Trench backfill should be placed in lifts with a maximum uncompacted thickness of 8 inches for walk-behind compactors and up to 18 inches for larger driven equipment.

5.3 PAVEMENT DESIGN

At our exploration locations we encountered 5.5 to 6.5 inches of AC over 6 to 7.5 inches of PCC pavement. All pavement restoration work shall meet the requirements of the City of Tacoma's Right of Way Restoration Policy. Standard detail SU-14A provides typical pavement restoration for asphalt over cement concrete base pavement.

6.0 CONSTRUCTION CONSIDERATIONS

6.1 GENERAL

The sewer alignments are generally located along paved roads. Site preparation to facilitate installation of utilities will generally involve removal of AC and underlying concrete pavement. Excavation to install the new utilities will generally encounter soil composed of silty sand with gravel, sand with silt and gravel, sandy silt, and silty gravel. Variable amounts of cobbles are present within the recessional outwash and glacial till deposits. Boulders were not encountered in our explorations but are common within the glacial deposits in the area.

6.2 SUBGRADE PREPARATION – TRENCH RESTORATION PAVING

After installation of utilities is complete, the exposed subgrade within the trench area and disturbed areas adjacent to the trench should be prepared for paving. The exposed subgrade beneath the pavement section will likely consist of silty sand with gravel to sandy gravel fill. Appropriate provisions should be taken to protect the subgrade from inclement weather. The subgrade should be compacted to a dense and unyielding condition to not less than 95 percent of the maximum dry density, as determined by ASTM D1557.

6.2.1 Subgrade Verification

Exposed subgrades and compacted fill should be evaluated by a representative from GeoDesign to verify the conditions are as anticipated, the compaction is adequate, and that it will provide the required support. If possible, the exposed subgrade should be evaluated by proof rolling. The subgrade should be proof rolled with a fully loaded dump truck or similar heavy rubber tire construction equipment to identify soft, loose, or unsuitable areas. If soft or loose zones are identified, these areas should be excavated to the extent indicated by the engineer or technician and replaced with structural fill or stabilization material.

6.3 EXCAVATION

6.3.1 Excavation

The soil at the site can be excavated with conventional earthwork equipment. Excavations should stand vertical to a depth of approximately 4 feet, provided groundwater seepage is not observed in the trench walls. Open excavation techniques may be used to excavate utility trenches, provided the walls of the excavation are cut at appropriate cut slopes determined by the contractor or supported using contractor-designed temporary shoring or shielding.

6.3.2 Temporary Shoring

Excavations that extend below a depth of 4 feet will require temporary support. If a conventional shield (such as a trench box) is used, the contractor should limit the length of open trench. If shoring is used, we recommend that the type and design of the shoring system be the responsibility of the contractor, who is in the best position to choose a system that fits the overall plan of operation and the subsurface conditions. All excavations should be made in accordance with applicable OSHA, local, and state regulations.

We recommend temporary shoring or shielding elements under drained conditions be designed for an equivalent fluid density of 35 pcf for active soil conditions. The design should include

appropriate lateral pressures caused by surcharge loads located within a horizontal distance equal to or less than the height of the wall. We recommend a lateral surcharge pressure of 70 psf to account for traffic loading adjacent to the trench.

The variable surficial fill material and the recessional outwash deposits will be prone to raveling and sloughing during excavation. The underlying glacial till is anticipated to stand near vertical with minor raveling.

Areas where significant raveling and sloughing of the trench sidewalls should be expected are provided in Table 2.

Table 2. Sloughing Potential of Soil Encountered in Explorations

Boring	Sloughing Potential	Material Susceptible to Sloughing (depth interval feet BGS)
B-1	Moderate	1.2 to 4.5
B-2	High	1.2 to 4.5
B-3	Moderate	1.1 to 7
B-4	Moderate	1 to 7.5
B-5	High	1.1 to 7
B-5	Moderate	7 to 12.5
B-6	Moderate	8 to 12

6.3.3 Temporary Dewatering

Groundwater was not encountered in our explorations to the maximum depth explored of 16.5 feet BGS. Based on the anticipated pipe invert of less than 15 feet BGS, significant dewatering is not anticipated. The contractor will be responsible for selection and design of the dewatering system. The contractor's dewatering methods should be capable of maintaining groundwater levels at least 2 feet below the base of the excavation (including the depth required for trench bedding and stabilization material).

Perched groundwater seepage may be encountered, particularly during periods of wet weather. Perched water may be encountered within the trench along the existing sewer pipe due to preferential flow within the pipe bedding or in other areas. We anticipate shallow sumps within the excavation will be enough for managing the perched groundwater and groundwater flow concentrated within the bedding material below the existing sanitary sewer, if encountered.

Flow rates for dewatering are likely to vary depending on location, soil type, and the season in which the excavation occurs. Dewatering systems should be capable of adapting to variable flows. We note that these recommendations are for guidance only. Dewatering of excavations is the sole responsibility of the contractor, as the contractor is in the best position to select these systems based on their means and methods. The contract plans and specification should address and identify a suitable dewatering discharge location and allowable quantities.

If sumps within the excavation are used, the discharge water will likely have high turbidity and require detention prior to disposal.

6.4 FILL MATERIALS

Fill material will be required to backfill over-excavations, pavement support, installing utilities, and drainage. The recommended fill materials are discussed below.

6.4.1 On-Site Soil

The on-site sand with silt, silty sand with gravel, and silty gravel material may be suitable for use as fill, provided it is approved by the City and can be properly moisture conditioned and compacted. Deleterious material in the fill layer and large cobble- and boulder-size particles should be removed from the fill. On-site material, if deemed suitable for fill by the contracting agency, may be used as fill.

6.4.2 On-Site Recycled Pavement

If allowed by the contracting agency, the on-site AC material can be milled in place prior to removal of the underlying PCC slab. The milled AC can be mixed with the underlying fill and/or native material and can be used for trench backfill material.

6.4.3 Off-Site Recycled Fill Materials

Recycled material generated off site should not be used on site without approval from the geotechnical engineer and acceptance by the City. The use of recycled material will be subject to performance criteria, gradation requirements, and hazardous material testing in conformance with WSS 9-03.21(1) – General Requirements and the requirements of the material for which it is being substituted. Recycled material may be suitable for use beneath hardscape areas, provided performance, gradation, and hazardous material testing results are acceptable.

6.4.4 Structural Fill

Structural fill placed for general site grading in improved areas should consist of clean, free-draining granular soil (sand and gravel) that is free from organic material or other deleterious and man-made materials, with a maximum particle size of approximately 3 inches and a maximum fines content of 5 percent by dry weight. The use of granular, free-draining material will increase the workability of the material during the wet season and the likelihood that the material can be placed and adequately compacted.

Imported granular material used for structural fill should be naturally occurring pit- or quarry-run rock, crushed rock, or crushed gravel and sand and should meet the specifications provided in WSS 9-03.14(1) – Gravel Borrow, with the exception that the percentage passing the U.S. Standard No. 200 sieve does not exceed 5 percent by dry weight. Structural fill should be placed in lifts with a maximum uncompacted thickness of 8 inches for walk-behind compactors and 12 inches for larger driven equipment. It should be compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D1557.

6.4.5 Pavement Base Course

Imported granular material used as aggregate base for pavement and beneath hardscape areas should consist of 1¼-inch-minus crushed rock base course material meeting the specifications

provided in the WSS 9-03.9(3) – Crushed Surfacing Base Course, with the exception that the aggregate should have less than 5 percent by dry weight passing the U.S. Standard No. 200 sieve. Hardscape and pavement base course material should be placed in lifts with a maximum uncompacted thickness of 8 inches for walk-behind compactors and 12 inches for larger driven equipment. It should be compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D1557.

6.4.6 Gravel Backfill for Pipe Zone Bedding

Pipe zone bedding material should be crushed surfacing top course as specified in WSS 9-03.9(3) – Crushed Surfacing Top Course, with the exception that is washed and does not contain fines.

6.4.7 Trench Backfill

Trench backfill material should be in accordance with City of Tacoma Standard Plan SU-16. The material should consist of “Gravel Backfill for Walls” as defined in WSS 9-03.12(2). The initial lift of utility trench fill over the top of the pipe should be a minimum of 2 feet thick to prevent damaging the pipe during compaction. Successive lift thickness should be limited based on the type of compaction equipment used. Utility trench fill in improved areas should be compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D1557, and in conformance with City of Tacoma Standard Plan SU-28. The on-site material consisting of recession outwash may also be suitable for trench backfill if approved by the contracting agency.

6.4.8 Stabilization Material

Stabilization material to backfill over-excavations or to stabilize soft subgrade areas should consist of crushed rock and should meet the specifications provided in WSS 9-03.9(2) – Permeable Ballast or spalls as defined in WSS 9-13.7(2) – Backfill for Rock Wall. The initial lift of stabilization material used to fill over-excavations should be 18 inches thick and compacted to a firm condition. Successive lifts should be 12 inches thick and compacted to a dense and unyielding condition.

6.5 GEOSYNTHETICS

Geosynthetic geotextiles may be necessary to stabilize the base of over-excavations when wet or saturated soil conditions are encountered and as a separator between subsurface drainage materials and native materials or fill. The geotextiles should be installed in conformance with the specifications provided in WSS 2-12 – Construction Geosynthetic.

6.5.1 Stabilization Geotextile

We recommend using a woven geotextile stabilization material at the base of over-excavations and to stabilize soft subgrade areas beneath paved areas. The geotextile should conform to the specifications for woven soil stabilization material provided in WSS 9-33.2(1) – Geotextile Properties, Table 3 Geotextile for Separation or Soil Stabilization.

6.6 WET WEATHER CONSIDERATIONS

This section describes additional recommendations with potential budget and schedule impacts that may affect the owner and site contractor if earthwork occurs during the wet season. These recommendations are based on the site conditions and our experience on previous construction projects completed in the area.

- Beneath the surficial pavement, the on-site silty sand will be susceptible to deterioration during wet weather. If construction is completed or extends into the wet season, we recommend stabilizing exposed areas where construction traffic is anticipated using a gravel pad.
- Earthwork should be accomplished in small sections to minimize exposure to wet weather.
- Excavation or the removal of unsuitable soil should be followed promptly by the placement and compaction of clean structural fill.
- The size of construction equipment and access to the area should be limited to prevent soil disturbance.
- The ground surface in the construction area should be sloped and sealed with a smooth-drum roller to promote rapid runoff of precipitation, to prevent surface water from flowing into excavations, and to prevent puddles from forming.
- Installation of sumps within excavations may be necessary to remove accumulated stormwater. The sumps should be located outside of the footing footprint and installed to a depth sufficient to lower the water to below the excavated subgrade elevation.
- Increased handling, excavation, and disposal of wet and disturbed surface materials should be expected.
- Protection of exposed soil subgrades and stockpiles will be required.
- Heavy rainfall can occur during winter months and can compromise earthwork schedules in this region.
- In general, snowfall is not dramatically high; however, frozen ground should not be proof rolled or compacted and fill should not be placed over frozen ground.

7.0 OBSERVATION OF CONSTRUCTION

Recommendations provided in this report assume that GeoDesign will be retained to provide geotechnical consultation and observation services during construction. Satisfactory earthwork performance depends to a large degree on the quality of construction. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed subsurface conditions often requires site-specific experience; therefore, GeoDesign personnel should visit the site with enough frequency to detect whether subsurface conditions change significantly from those anticipated and to verify the work is completed in accordance with the construction drawings and specifications.

Observation and laboratory testing of the proposed fill materials should be completed to verify that proposed fill materials are in conformance with our recommendations. Observation of the placement and compaction of the fill should be performed to verify it meets the required compaction and will be capable of providing the structural support for the proposed infrastructure. A sufficient number of in-place density tests should be performed as the fill is placed to verify the required relative compaction is being achieved.

8.0 LIMITATIONS

We have prepared this report for use by KPG, P.S., the City of Tacoma, and its consultants in design of this project. The data and report can be used for bidding or estimating purposes, but our report, conclusions, and interpretations should not be construed as warranty of the subsurface conditions and are not applicable to other nearby building sites.

Exploration observations indicate soil conditions only at specific locations and only to the depths penetrated. They do not necessarily reflect soil strata or water level variations that may exist between exploration locations. If subsurface conditions differing from those described are noted during the course of excavation and construction, re-evaluation will be necessary.

The site development plans and design details were preliminary at the time this report was prepared. If design changes are made, we request that we be retained to review our conclusions and recommendations and to provide a written modification or verification.

The scope of our services does not include services related to construction safety precautions and our recommendations are not intended to direct the contractor's methods, techniques, sequences, or procedures, except as specifically described in this report for consideration in design.

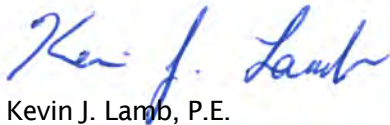
Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices in this area at the time this report was prepared. No warranty, express or implied, should be understood.

♦ ♦ ♦

We appreciate the opportunity to be of continued service to you. Please call if you have questions concerning this report or if we can provide additional services.

Sincerely,

GeoDesign, Inc.



Kevin J. Lamb, P.E.
Principal Engineer



Signed 07/27/2021

REFERENCES

ASTM, 2020. Annual Book of ASTM Standards, Vol. 4.08 and 4.09, Soil and Rock (I and II): D420 - latest, Philadelphia: ASTM.

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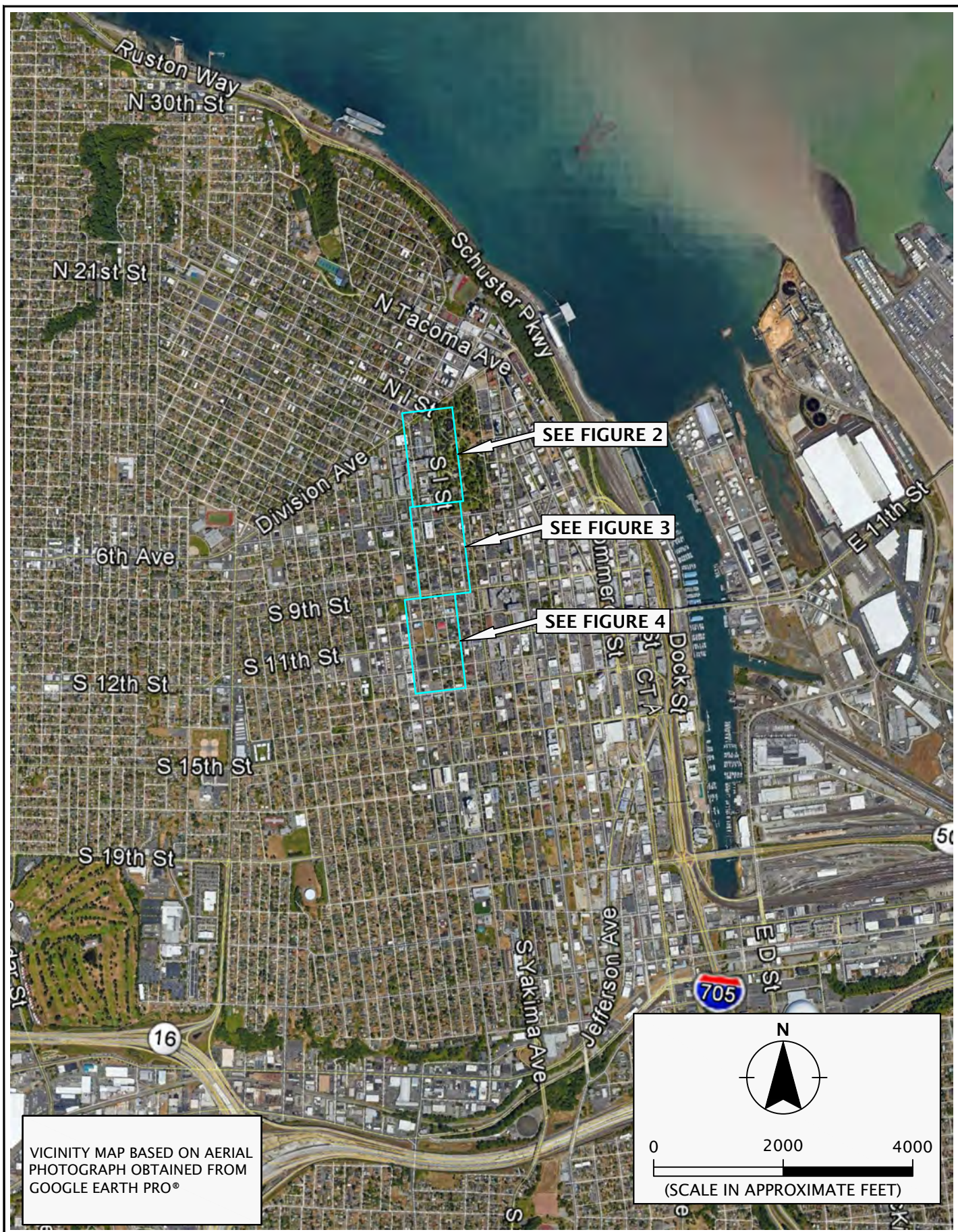
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Tacoma, 2016, *Soil Management Plan, Tacoma Smelter Plume and Commercial/Industrial Testing Requirements, Tacoma, Washington*, March 29, 2016, prepared by City of Tacoma Environmental Services and Landau Associates, 52p.

Washington State Department of Transportation, 2020. Standard Specifications for Road, Bridge and Municipal Construction. M 41-10.

FIGURES

Printed By: mmiller | Print Date: 7/26/2021 3:51:44 PM
File Name: J:\E-L\KPG\KPG-128\KPG-128-01\Figures\CAD\KPG-128-01-VM01.dwg | Layout: FIGURE 1



VICINITY MAP BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®

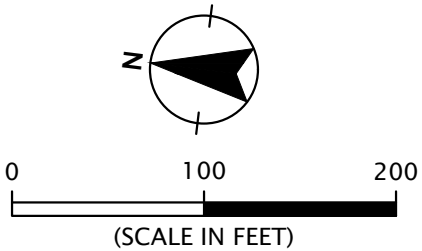
GEO DESIGN INC AN NIVIS COMPANY	KPG-128-01	VICINITY MAP	
	JULY 2021	WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA	FIGURE 1




LEGEND:

B-1  BORING

SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
NOVEMBER 12, 2020

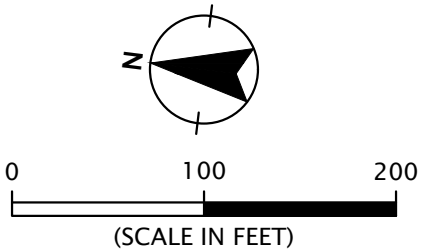


	10-128-01 JULY 2021	SITE PLAN WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA	FIGURE 2
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LEGEND:

B-3  BORING



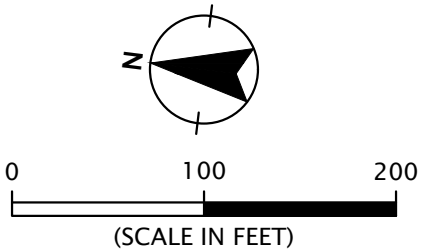
SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
NOVEBMER 12, 2020

GEO DESIGN AN NVIS COMPANY		KPG-128-01	FIGURE 3
JULY 2021		SITE PLAN	
WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA		FIGURE 3	





LEGEND:

B-5  BORING



SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
NOVEMBER 12, 2020

 AN  COMPANY	KPG-128-01	SITE PLAN
	JULY 2021	WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA
FIGURE 4		

APPENDIX

APPENDIX

FIELD EXPLORATIONS

GENERAL

Subsurface conditions at the site were explored by drilling six borings to depths between 16 and 16.5 feet BGS. The explorations were completed on November 7, 2020 by Boretec¹ of Bellevue, Washington, using a trailer-mounted drill rig using hollow-stem auger drilling techniques. The exploration logs are presented in this appendix. The locations of the explorations were determined based on existing conditions and field measurements. This information should be considered accurate to the degree implied by the methods used.

SOIL SAMPLING

We collected representative samples of the various soils encountered in the explorations for geotechnical laboratory testing. Samples were collected from the borings using a 1½-inch-inside diameter, split-spoon sampler (SPT sampler). The split-spoon sampling was conducted in general accordance with ASTM D1586. The 1½-inch-inside diameter, split-spoon samplers were driven into the soil with 140-pound hammer free falling 30 inches. The samplers were driven a total distance of 18 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the boring logs, unless otherwise noted. Sampling methods and intervals are shown on the exploration logs.

The SPT blows completed by Boretec¹, Inc. were conducted using two wraps around a cathead.

SOIL CLASSIFICATION

The soil samples were classified in accordance with the "Exploration Key" (Table A-1) and "Soil Classification System" (Table A-2), which are presented in this appendix. The exploration logs indicate the depths at which the soils or their characteristics change, although the change could be gradual. A horizontal line between soil types indicates an observed change. If the change was gradual the change is indicated using a dashed line. Classifications are shown on the exploration logs.

LABORATORY TESTING

CLASSIFICATION

The soil samples were classified in the laboratory to confirm field classifications. The laboratory classifications are shown on the exploration logs if those classifications differed from the field classifications.

MOISTURE CONTENT










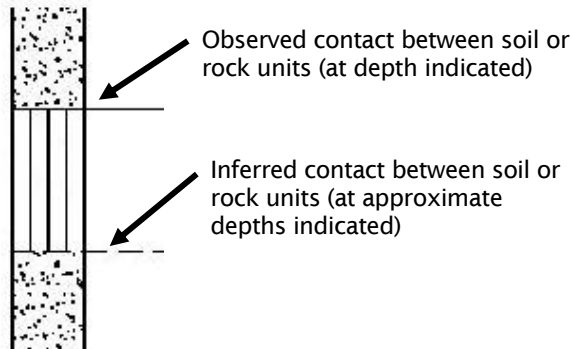

Moisture content determinations were completed on select soil samples in general accordance with ASTM D2216. The moisture content is a ratio of the weight of the water to soil in a test sample and is expressed as a percentage. The test results are presented in this appendix.


GRAIN-SIZE ANALYSIS

Grain-size analysis was completed on select soil samples to determine the distribution of soil particle sizes. The testing was completed in general accordance with ASTM C136, ASTM C117, and ASTM D1140. The test results are presented in this appendix.


FINES CONTENT

Fines content testing was completed on select soil samples to determine soil characteristics. The testing was completed in general accordance with ASTM D1140. The test results are presented in this appendix.

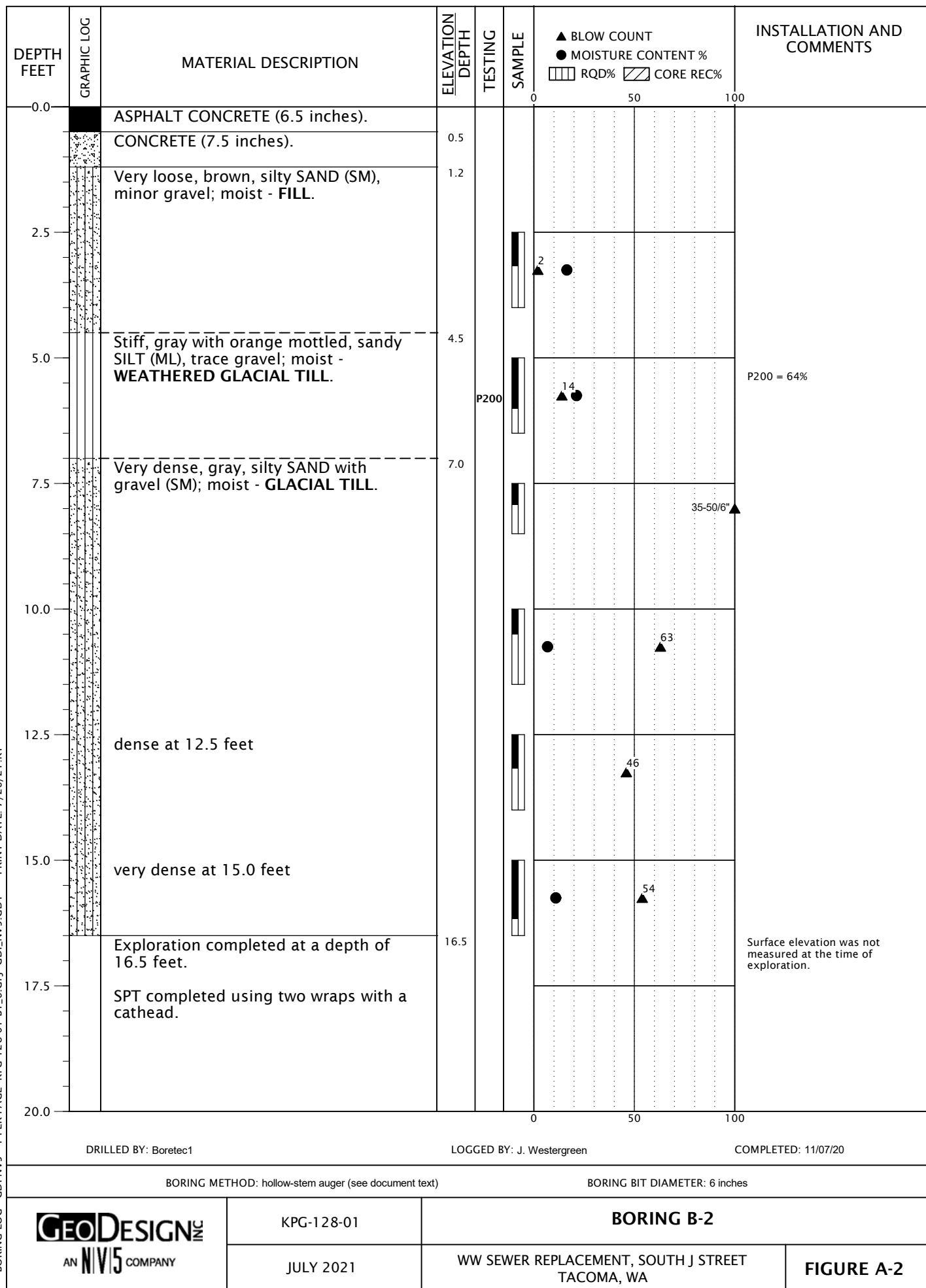
SYMBOL		SAMPLING DESCRIPTION		
        	<p>Location of sample collected in general accordance with ASTM D1586 using Standard Penetration Test with recovery</p> <p>Location of sample collected using thin-wall Shelby tube or Geoprobe® sampler in general accordance with ASTM D1587 with recovery</p> <p>Location of sample collected using Dames & Moore sampler and 300-pound hammer or pushed with recovery</p> <p>Location of sample collected using Dames & Moore sampler and 140-pound hammer or pushed with recovery</p> <p>Location of sample collected using 3-inch-O.D. California split-spoon sampler and 140-pound hammer with recovery</p> <p>Location of grab sample</p> <p>Rock coring interval</p> <p>Water level during drilling</p> <p>Water level taken on date shown</p>			
	<p>Graphic Log of Soil and Rock Types</p> 			
	GEOTECHNICAL TESTING EXPLANATIONS			
	ATT	Atterberg Limits	P	Pushed Sample
	CBR	California Bearing Ratio	PP	Pocket Penetrometer
	CON	Consolidation	P200	Percent Passing U.S. Standard No. 200 Sieve
	DD	Dry Density		
	DS	Direct Shear	RES	Resilient Modulus
	HYD	Hydrometer Gradation	SIEV	Sieve Gradation
MC	Moisture Content	TOR	Torvane	
MD	Moisture-Density Relationship	UC	Unconfined Compressive Strength	
NP	Non-Plastic	VS	Vane Shear	
OC	Organic Content	kPa	Kilopascal	
ENVIRONMENTAL TESTING EXPLANATIONS				
CA	Sample Submitted for Chemical Analysis	ND	Not Detected	
P	Pushed Sample	NS	No Visible Sheen	
PID	Photoionization Detector Headspace Analysis	SS	Slight Sheen	
		MS	Moderate Sheen	
ppm	Parts per Million	HS	Heavy Sheen	
		EXPLORATION KEY		
		TABLE A-1		

RELATIVE DENSITY - COARSE-GRAINED SOIL										
Relative Density		Standard Penetration Resistance		Dames & Moore Sampler (140-pound hammer)		Dames & Moore Sampler (300-pound hammer)				
Very Loose		0 - 4		0 - 11		0 - 4				
Loose		4 - 10		11 - 26		4 - 10				
Medium Dense		10 - 30		26 - 74		10 - 30				
Dense		30 - 50		74 - 120		30 - 47				
Very Dense		More than 50		More than 120		More than 47				
CONSISTENCY - FINE-GRAINED SOIL										
Consistency		Standard Penetration Resistance		Dames & Moore Sampler (140-pound hammer)		Dames & Moore Sampler (300-pound hammer)		Unconfined Compressive Strength (tsf)		
Very Soft		Less than 2		Less than 3		Less than 2		Less than 0.25		
Soft		2 - 4		3 - 6		2 - 5		0.25 - 0.50		
Medium Stiff		4 - 8		6 - 12		5 - 9		0.50 - 1.0		
Stiff		8 - 15		12 - 25		9 - 19		1.0 - 2.0		
Very Stiff		15 - 30		25 - 65		19 - 31		2.0 - 4.0		
Hard		More than 30		More than 65		More than 31		More than 4.0		
PRIMARY SOIL DIVISIONS					GROUP SYMBOL		GROUP NAME			
COARSE-GRAINED SOIL (more than 50% retained on No. 200 sieve)		GRAVEL (more than 50% of coarse fraction retained on No. 4 sieve)		CLEAN GRAVEL (< 5% fines)		GW or GP		GRAVEL		
				GRAVEL WITH FINES (≥ 5% and ≤ 12% fines)		GW-GM or GP-GM		GRAVEL with silt		
						GW-GC or GP-GC		GRAVEL with clay		
				GRAVEL WITH FINES (> 12% fines)		GM		silty GRAVEL		
						GC		clayey GRAVEL		
						GC-GM		silty, clayey GRAVEL		
		SAND (50% or more of coarse fraction passing No. 4 sieve)		CLEAN SAND (<5% fines)		SW or SP		SAND		
				SAND WITH FINES (≥ 5% and ≤ 12% fines)		SW-SM or SP-SM		SAND with silt		
						SW-SC or SP-SC		SAND with clay		
				SAND WITH FINES (> 12% fines)		SM		silty SAND		
						SC		clayey SAND		
						SC-SM		silty, clayey SAND		
FINE-GRAINED SOIL (50% or more passing No. 200 sieve)		Liquid limit less than 50		ML		SILT				
				CL		CLAY				
				CL-ML		silty CLAY				
				OL		ORGANIC SILT or ORGANIC CLAY				
		Liquid limit 50 or greater		MH		SILT				
				CH		CLAY				
				OH		ORGANIC SILT or ORGANIC CLAY				
				HIGHLY ORGANIC SOIL		PT		PEAT		
MOISTURE CLASSIFICATION			ADDITIONAL CONSTITUENTS							
Term		Field Test		Secondary granular components or other materials such as organics, man-made debris, etc.						
				Silt and Clay In:			Sand and Gravel In:			
				Percent	Fine-Grained Soil	Coarse-Grained Soil	Percent	Fine-Grained Soil	Coarse-Grained Soil	
dry		very low moisture, dry to touch								
moist		damp, without visible moisture		< 5	trace	trace	< 5	trace	trace	
				5 - 12	minor	with	5 - 15	minor	minor	
wet		visible free water, usually saturated		> 12	some	silty/clayey	15 - 30	with	with	
							> 30	sandy/gravelly	Indicate %	
			SOIL CLASSIFICATION SYSTEM						TABLE A-2	

BORING LOG - CDI-NV5 - 1 PER PAGE KPG-128-01-B1-6.GPJ CDI-NV5.GDT PRINT DATE: 7/26/21:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % ▨ RQD% ▨ CORE REC%	INSTALLATION AND COMMENTS
0.0		ASPHALT CONCRETE (6.5 inches).				0 50 100	
0.5		CONCRETE (7.5 inches).	0.5				
1.2		Medium dense, gray, silty SAND with gravel (SM); moist - FILL.	1.2				
2.5							
4.5		Dense, gray, silty SAND with gravel and cobbles (SM); moist - GLACIAL TILL.	4.5	SIEV		23	
5.0						41	
7.5		very dense at 7.5 feet				28-50/4"	
10.0		dense at 10.0 feet				37	
12.5		very dense at 12.5 feet				18-50/6"	
15.0						18-50/6"	
16.0		Exploration completed at a depth of 16.0 feet.	16.0				Surface elevation was not measured at the time of exploration.
17.5		SPT completed using two wraps with a cathead.					
20.0							
DRILLED BY: Boretect1		LOGGED BY: J. Westergreen		COMPLETED: 11/07/20			
BORING METHOD: hollow-stem auger (see document text)				BORING BIT DIAMETER: 6 inches			
		KPG-128-01	BORING B-1				
AN NV5 COMPANY		JULY 2021	WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA			FIGURE A-1	

BORING LOG - CDI-NV5 - 1 PER PAGE KPG-128-01-B1_6.GPJ CDI-NV5.GDT PRINT DATE: 7/26/21:KT

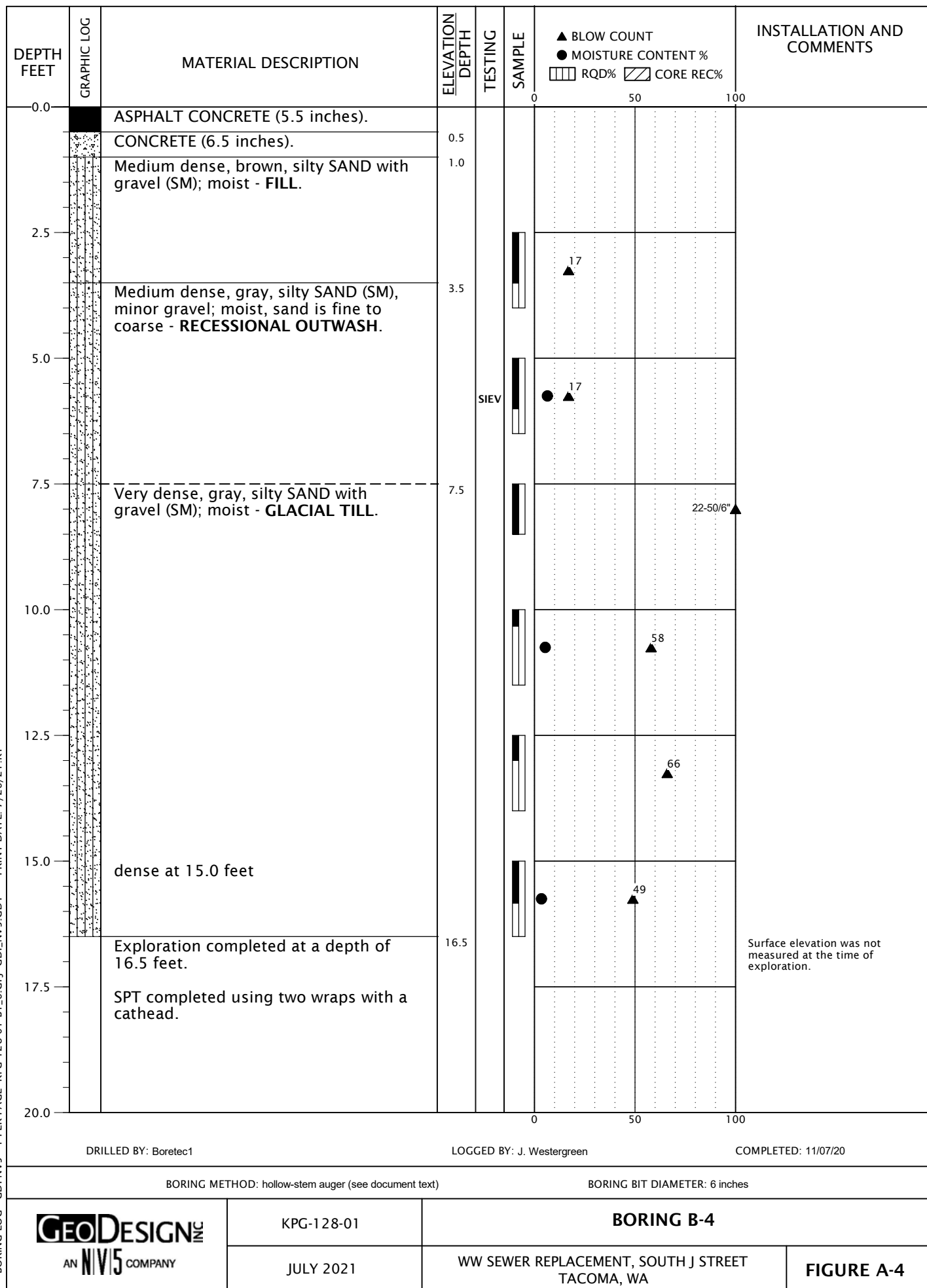


BORING LOG - GDI-NV5 - 1 PER PAGE KPG-128-01-B1-6.GPJ GDI-NV5.GDT PRINT DATE: 7/26/21:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % ▨ RQD% ▨ CORE REC%		INSTALLATION AND COMMENTS
0.0		ASPHALT CONCRETE (6.0 inches).				0	50	100
0.5		CONCRETE (7.0 inches).	0.5					
1.1		Medium dense, gray-brown, silty SAND with gravel (SM); moist - FILL.	1.1					
2.5								
5.0								
7.5		Dense, gray, silty SAND with gravel (SM); moist - GLACIAL TILL.	7.0					
9.5		Very dense, gray, silty GRAVEL with sand and cobbles (GM); moist - GLACIAL TILL.	9.5					
12.0		Dense, gray, silty SAND with gravel and cobbles (SM); moist - GLACIAL TILL.	12.0					
15.0		very dense at 15.0 feet						
16.5		Exploration completed at a depth of 16.5 feet.	16.5					
17.5		SPT completed using two wraps with a cathead.						
20.0								
DRILLED BY: Boretect1		LOGGED BY: J. Westergreen		COMPLETED: 11/07/20				
BORING METHOD: hollow-stem auger (see document text)		BORING BIT DIAMETER: 6 inches						
GEO DESIGN AN NVIS COMPANY		KPG-128-01	BORING B-3					
JULY 2021		WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA						
		FIGURE A-3						

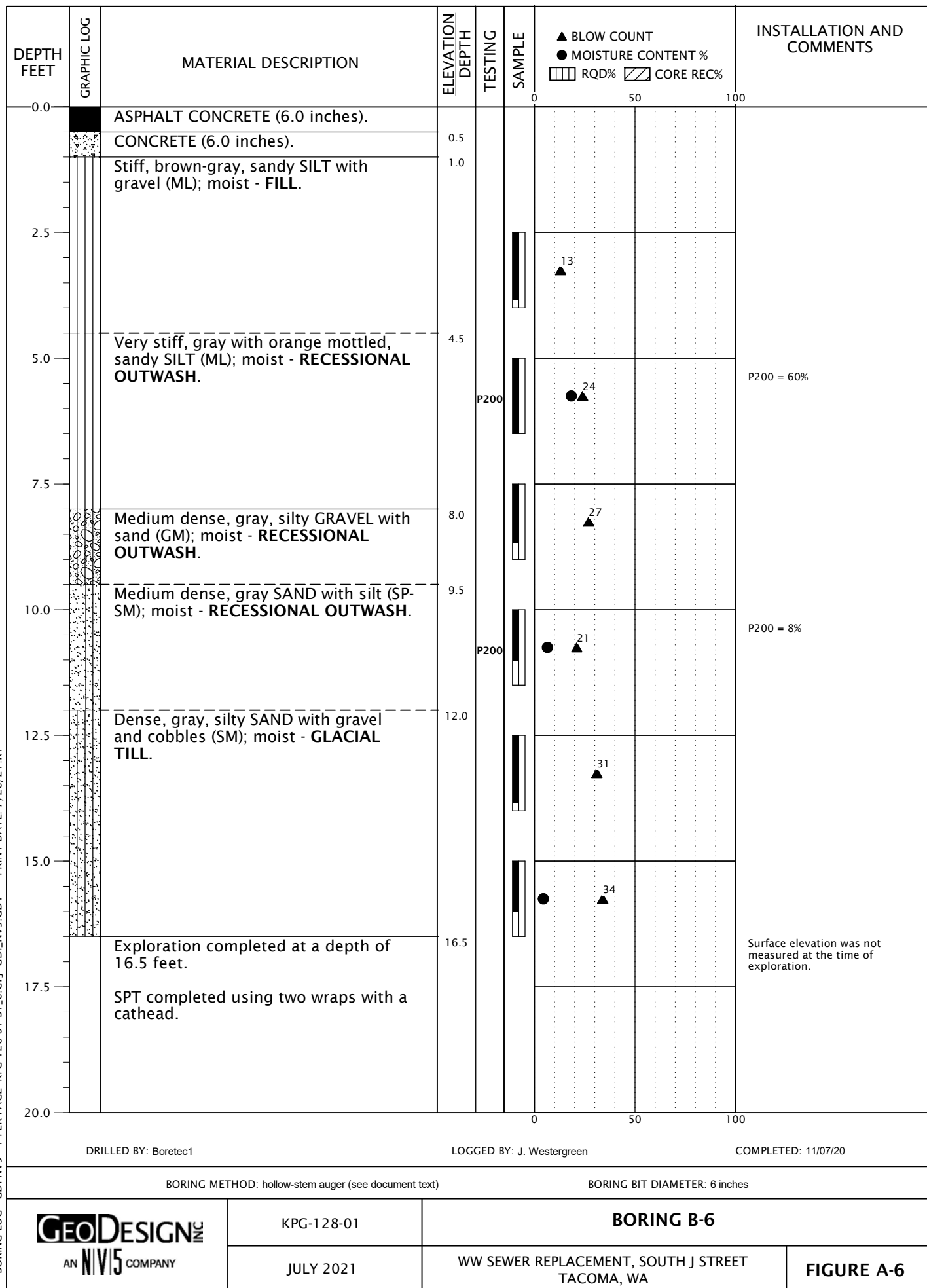
Surface elevation was not measured at the time of exploration.

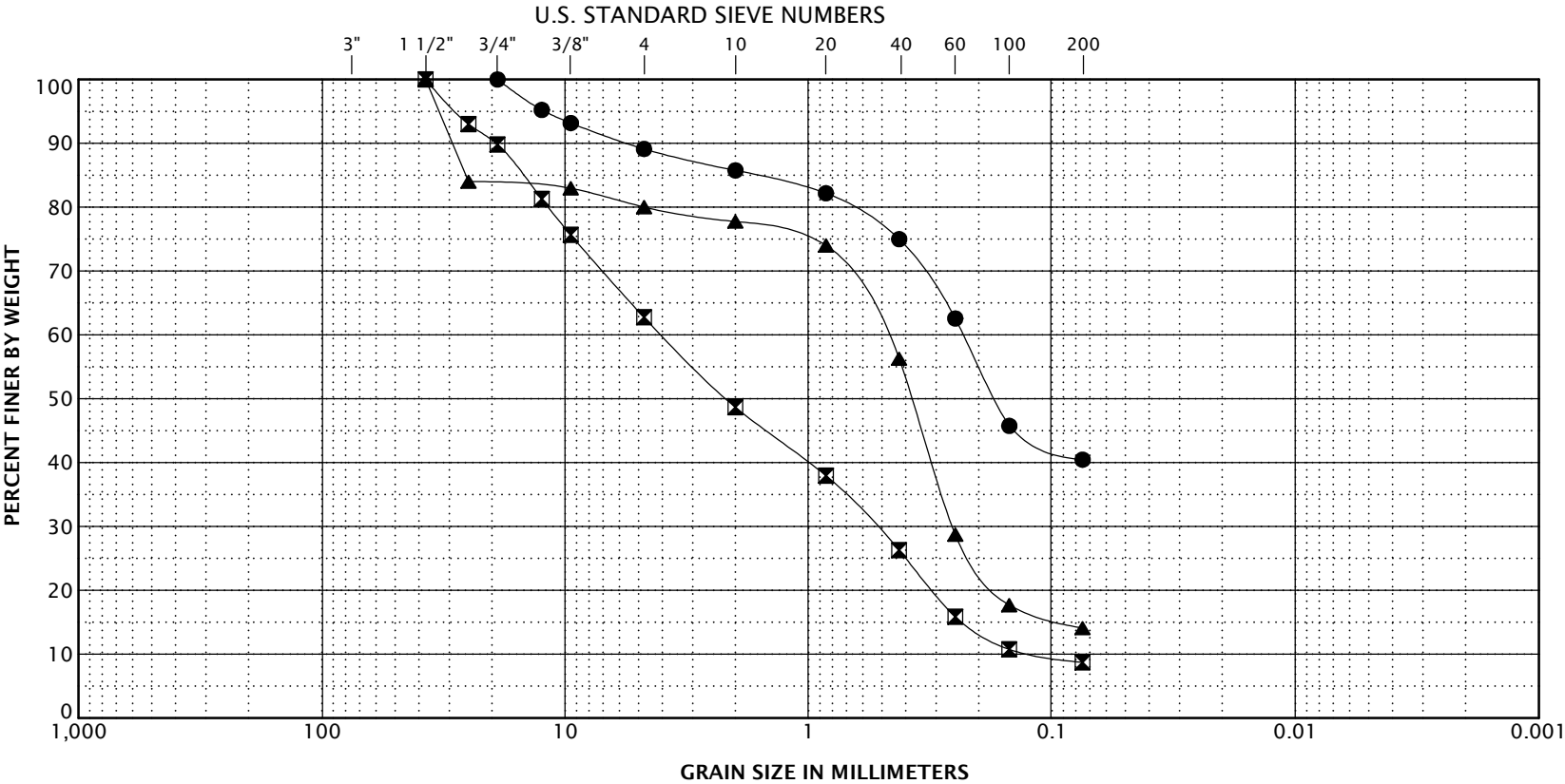
BORING LOG - CDI-NV5 - 1 PER PAGE KPG-128-01-B1_6.GPJ CDI-NV5.GDT PRINT DATE: 7/26/21:KT



DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % RQD% CORE REC%		INSTALLATION AND COMMENTS	
0.0		ASPHALT CONCRETE (5.5 inches).				0	50	100	
		CONCRETE (7.5 inches).	0.5						
		Loose, brown, silty SAND (SM), trace gravel; moist - FILL.	1.1						
2.5									
5.0									
7.5		Medium dense, gray, silty SAND with gravel (SM); moist, sand is fine to coarse - RECESSIONAL OUTWASH.	7.0						
10.0		minor gravel at 10.0 feet							
12.5		very dense, with cobbles at 12.5 feet							
15.0		medium dense, without gravel and cobbles at 15.0 feet							
16.5		Exploration completed at a depth of 16.5 feet.	16.5					Surface elevation was not measured at the time of exploration.	
17.5		SPT completed using two wraps with a cathead.							
20.0									
DRILLED BY: Boretect1		LOGGED BY: J. Westergreen		COMPLETED: 11/07/20					
BORING METHOD: hollow-stem auger (see document text)					BORING BIT DIAMETER: 6 inches				
GEO DESIGN AN NVIS COMPANY		KPG-128-01	BORING B-5						
JULY 2021		WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA							
		FIGURE A-5							

BORING LOG - GDI-NV5 - 1 PER PAGE KPG-128-01-B1-6.GPJ GDI-NV5.GDT PRINT DATE: 7/26/21-KT





BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY

KEY	EXPLORATION NUMBER	SAMPLE DEPTH (FEET)	MOISTURE CONTENT (PERCENT)	D60	D50	D30	D10	D5	GRAVEL (PERCENT)	SAND (PERCENT)	SILT (PERCENT)	CLAY (PERCENT)
●	B-1	2.5	10	0.23	0.17				11	49	40	
⊠	B-3	7.5	5	4.01	2.17	0.53	0.12		37	54	9	
▲	B-4	5.0	6	0.49	0.38	0.26			20	66	14	




KPG-128-01

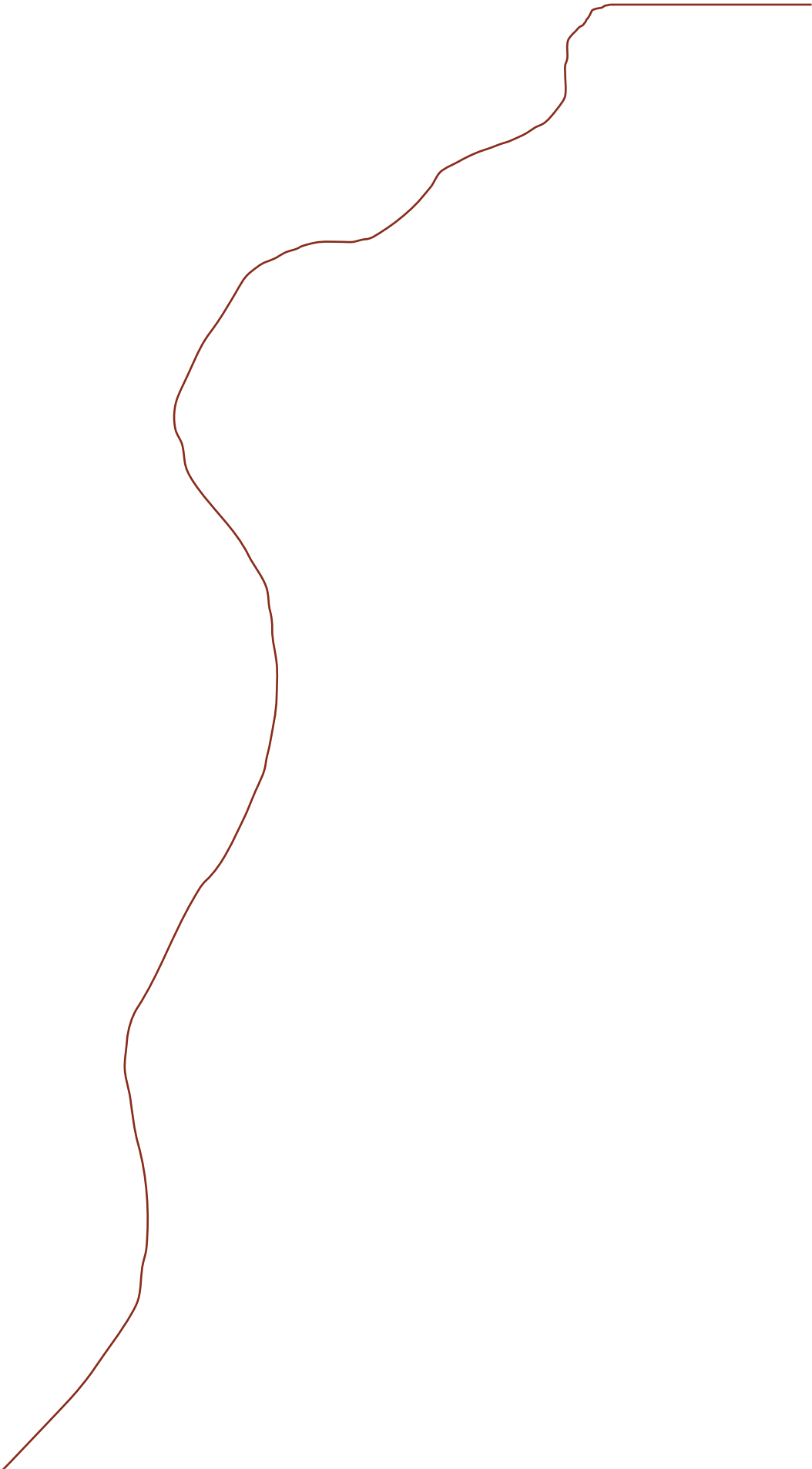
JULY 2021

GRAIN-SIZE TEST RESULTS

WW SEWER REPLACEMENT, SOUTH J STREET
TACOMA, WA

FIGURE A-7

SAMPLE INFORMATION			MOISTURE CONTENT (PERCENT)	DRY DENSITY (PCF)	SIEVE			ATTERBERG LIMITS		
EXPLORATION NUMBER	SAMPLE DEPTH (FEET)	ELEVATION (FEET)			GRAVEL (PERCENT)	SAND (PERCENT)	P200 (PERCENT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX
B-1	2.5		10		11	49	40			
B-1	7.5		8							
B-1	12.5		4							
B-2	2.5		16							
B-2	5.0		21				64			
B-2	10.0		7							
B-2	15.0		11							
B-3	7.5		5		37	54	9			
B-3	12.5		5							
B-4	5.0		6		20	66	14			
B-4	10.0		5							
B-4	15.0		3							
B-5	5.0		15							
B-5	10.0		7							
B-5	15.0		7							
B-6	5.0		18				60			
B-6	10.0		6				8			
B-6	15.0		4							
			KPG-128-01		SUMMARY OF LABORATORY DATA					
			JULY 2021		WW SEWER REPLACEMENT, SOUTH J STREET TACOMA, WA				FIGURE A-8	



APPENDIX C

NPDES CONSTRUCTION STORMWATER GENERAL PERMIT

Issuance Date: November 18, 2020
Effective Date: January 1, 2021
Expiration Date: December 31, 2025

CONSTRUCTION STORMWATER GENERAL PERMIT

National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge
General Permit for Stormwater Discharges Associated with Construction Activity

State of Washington
Department of Ecology
Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 Revised Code of Washington
(State of Washington Water Pollution Control Act)
and
Title 33 United States Code, Section 1251 et seq.
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified, or revoked, Permittees that have properly
obtained coverage under this general permit are authorized to discharge in accordance
with the special and general conditions that follow.



Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.

Table 1 Summary of Required Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S5.A and S8	High Turbidity/Transparency Phone Reporting	As Necessary	Within 24 hours
S5.B	Discharge Monitoring Report	Monthly*	Within 15 days following the end of each month
S5.F and S8	Noncompliance Notification – Telephone Notification	As necessary	Within 24 hours
S5.F	Noncompliance Notification – Written Report	As necessary	Within 5 Days of non-compliance
S9.D	Request for Chemical Treatment Form	As necessary	Written approval from Ecology is required prior to using chemical treatment (with the exception of dry ice, CO ₂ or food grade vinegar to adjust pH)
G2	Notice of Change in Authorization	As necessary	
G6	Permit Application for Substantive Changes to the Discharge	As necessary	
G8	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration
S2.A	Notice of Permit Transfer	As necessary	
G19	Notice of Planned Changes	As necessary	
G21	Reporting Anticipated Non-compliance	As necessary	

NOTE: *Permittees must submit electronic Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology monthly, regardless of site discharge, for the full duration of permit coverage. Refer to Section S5.B of this General Permit for more specific information regarding DMRs.

Table 2 Summary of Required On-site Documentation

Document Title	Permit Conditions
Permit Coverage Letter	See Conditions S2, S5
Construction Stormwater General Permit (CSWGP)	See Conditions S2, S5
Site Log Book	See Conditions S4, S5
Stormwater Pollution Prevention Plan (SWPPP)	See Conditions S5, S9
Site Map	See Conditions S5, S9

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Permit Area

This Construction Stormwater General Permit (CSWGP) covers all areas of Washington State, except for federal operators and Indian Country as specified in Special Condition S1.E.3 and 4.

B. Operators Required to Seek Coverage Under this General Permit

1. Operators of the following construction activities are required to seek coverage under this CSWGP:
 - a. Clearing, grading and/or excavation that results in the disturbance of one or more acres (including off-site disturbance acreage related to construction-support activity as authorized in S1.C.2) and discharges stormwater to surface waters of the State; and clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State.
 - i. This category includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State (that is, forest practices that prepare a site for construction activities); and
 - b. Any size construction activity discharging stormwater to waters of the State that the Washington State Department of Ecology (Ecology):
 - i. Determines to be a significant contributor of pollutants to waters of the State of Washington.
 - ii. Reasonably expects to cause a violation of any water quality standard.
2. Operators of the following activities are not required to seek coverage under this CSWGP (unless specifically required under Special Condition S1.B.1.b, above):
 - a. Construction activities that discharge all stormwater and non-stormwater to groundwater, sanitary sewer, or combined sewer, and have no point source discharge to either surface water or a storm sewer system that drains to surface waters of the State.
 - b. Construction activities covered under an Erosivity Waiver (Special Condition S1.F).
 - c. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

C. Authorized Discharges

1. ***Stormwater Associated with Construction Activity.*** Subject to compliance with the terms and conditions of this permit, Permittees are authorized to discharge stormwater associated with construction activity to surface waters of the State or to a storm sewer system that drains to surface waters of the State. (Note that “surface waters of the

State” may exist on a construction site as well as off site; for example, a creek running through a site.)

2. ***Stormwater Associated with Construction Support Activity.*** This permit also authorizes stormwater discharge from support activities related to the permitted construction site (for example, an on-site portable rock crusher, off-site equipment staging yards, material storage areas, borrow areas, etc.) provided:
 - a. The support activity relates directly to the permitted construction site that is required to have an NPDES permit; and
 - b. The support activity is not a commercial operation serving multiple unrelated construction projects, and does not operate beyond the completion of the construction activity; and
 - c. Appropriate controls and measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) for the discharges from the support activity areas.
3. ***Non-Stormwater Discharges.*** The categories and sources of non-stormwater discharges identified below are authorized conditionally, provided the discharge is consistent with the terms and conditions of this permit:
 - a. Discharges from fire-fighting activities.
 - b. Fire hydrant system flushing.
 - c. Potable water, including uncontaminated water line flushing.
 - d. Hydrostatic test water.
 - e. Uncontaminated air conditioning or compressor condensate.
 - f. Uncontaminated groundwater or spring water.
 - g. Uncontaminated excavation dewatering water (in accordance with S9.D.10).
 - h. Uncontaminated discharges from foundation or footing drains.
 - i. Uncontaminated or potable water used to control dust. Permittees must minimize the amount of dust control water used.
 - j. Routine external building wash down that does not use detergents.
 - k. Landscape irrigation water.

The SWPPP must adequately address all authorized non-stormwater discharges, except for discharges from fire-fighting activities, and must comply with Special Condition S3. At a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following: dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5 – 8.5 standard units (su), if necessary.

D. Prohibited Discharges

The following discharges to waters of the State, including groundwater, are prohibited:

1. Concrete wastewater
2. Wastewater from washout and clean-up of stucco, paint, form release oils, curing compounds and other construction materials.
3. Process wastewater as defined by 40 Code of Federal Regulations (CFR) 122.2 (See Appendix A of this permit).
4. Slurry materials and waste from shaft drilling, including process wastewater from shaft drilling for construction of building, road, and bridge foundations unless managed according to Special Condition S9.D.9.j.
5. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
6. Soaps or solvents used in vehicle and equipment washing.
7. Wheel wash wastewater, unless managed according to Special Condition S9.D.9.
8. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed according to Special Condition S9.D.10.

E. Limits on Coverage

Ecology may require any discharger to apply for and obtain coverage under an individual permit or another more specific general permit. Such alternative coverage will be required when Ecology determines that this CSWGP does not provide adequate assurance that water quality will be protected, or there is a reasonable potential for the project to cause or contribute to a violation of water quality standards.

The following stormwater discharges are not covered by this permit:

1. Post-construction stormwater discharges that originate from the site after completion of construction activities and the site has undergone final stabilization.
2. Non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance, from which there is natural runoff as excluded in 40 CFR Subpart 122.
3. Stormwater from any federal operator.
4. Stormwater from facilities located on **Indian Country** as defined in 18 U.S.C. §1151, except portions of the Puyallup Reservation as noted below.

Indian Country includes:

- a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.
- b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.
- c. All off-reservation federal trust lands held for Native American Tribes.

Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

5. Stormwater from any site covered under an existing NPDES individual permit in which stormwater management and/or treatment requirements are included for all stormwater discharges associated with construction activity.
6. Stormwater from a site where an applicable Total Maximum Daily Load (TMDL) requirement specifically precludes or prohibits discharges from construction activity.

F. Erosivity Waiver

Construction site operators may qualify for an Erosivity Waiver from the CSWGP if the following conditions are met:

1. The site will result in the disturbance of fewer than five (5) acres and the site is not a portion of a common plan of development or sale that will disturb five (5) acres or greater.
2. Calculation of Erosivity “R” Factor and Regional Timeframe:
 - a. The project’s calculated rainfall erosivity factor (“R” Factor) must be less than five (5) during the period of construction activity, (See the CSWGP homepage <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html> for a link to the EPA’s calculator and step by step instructions on computing the “R” Factor in the *EPA Erosivity Waiver Fact Sheet*). The period of construction activity starts when the land is first disturbed and ends with final stabilization. In addition:
 - b. The entire period of construction activity must fall within the following timeframes:
 - i. For sites west of the Cascades Crest: June 15 – September 15.
 - ii. For sites east of the Cascades Crest, excluding the Central Basin: June 15 – October 15.
 - iii. For sites east of the Cascades Crest, within the Central Basin: no timeframe restrictions apply. The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches. For a map of the Central Basin (Average Annual Precipitation Region 2), refer to: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.html>.
3. Construction site operators must submit a complete Erosivity Waiver certification form at least one week before disturbing the land. Certification must include statements that the operator will:
 - a. Comply with applicable local stormwater requirements; and
 - b. Implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards.
4. This waiver is not available for facilities declared significant contributors of pollutants as defined in Special Condition S1.B.1.b or for any size construction activity that could

reasonably expect to cause a violation of any water quality standard as defined in Special Condition S1.B.1.b.ii.

5. This waiver does not apply to construction activities which include non-stormwater discharges listed in Special Condition S1.C.3.
6. If construction activity extends beyond the certified waiver period for any reason, the operator must either:
 - a. Recalculate the rainfall erosivity “R” factor using the original start date and a new projected ending date and, if the “R” factor is still under 5 *and* the entire project falls within the applicable regional timeframe in Special Condition S1.F.2.b, complete and submit an amended waiver certification form before the original waiver expires; *or*
 - b. Submit a complete permit application to Ecology in accordance with Special Condition S2.A and B before the end of the certified waiver period.

S2. APPLICATION REQUIREMENTS

A. Permit Application Forms

1. ***Notice of Intent Form***

- a. Operators of new or previously unpermitted construction activities must submit a complete and accurate permit application (Notice of Intent, or NOI) to Ecology.
- b. Operators must apply using the electronic application form (NOI) available on Ecology’s website (<http://ecy.wa.gov/programs/wq/stormwater/construction/index.html>). Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

- c. The operator must submit the NOI at least 60 days before discharging stormwater from construction activities and must submit it prior to the date of the first public notice (See Special Condition S2.B, below, for details). The 30-day public comment period begins on the publication date of the second public notice. Unless Ecology responds to the complete application in writing, coverage under the general permit will automatically commence on the 31st day following receipt by Ecology of a *completed* NOI, or the issuance date of this permit, whichever is later; unless Ecology specifies a later date in writing as required by WAC173-226-200(2). See S8.B for Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters.
- d. If an applicant intends to use a Best Management Practice (BMP) selected on the basis of Special Condition S9.C.4 (“demonstrably equivalent” BMPs), the applicant must notify Ecology of its selection as part of the NOI. In the event the applicant selects BMPs after submission of the NOI, the applicant must provide notice of the

selection of an equivalent BMP to Ecology at least 60 days before intended use of the equivalent BMP.

- e. Applicants must notify Ecology if they are aware of contaminated soils and/or groundwater associated with the construction activity. Provide detailed information with the NOI (as known and readily available) on the nature and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment BMPs proposed to control the discharge of soil and/or groundwater contaminants in stormwater. Examples of such detail may include, but are not limited to:
 - i. List or table of all known contaminants with laboratory test results showing concentration and depth,
 - ii. Map with sample locations,
 - iii. Related portions of the Stormwater Pollution Prevention Plan (SWPPP) that address the management of contaminated and potentially contaminated construction stormwater and dewatering water,
 - iv. Dewatering plan and/or dewatering contingency plan.

2. *Transfer of Coverage Form*

The Permittee can transfer current coverage under this permit to one or more new operators, including operators of sites within a Common Plan of Development, provided:

- i. The Permittee submits a complete Transfer of Coverage Form to Ecology, signed by the current and new discharger and containing a specific date for transfer of permit responsibility, coverage and liability (including any Administrative Orders associated with the permit); and
- ii. Ecology does not notify the current discharger and new discharger of intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the written agreement.

When a current discharger (Permittee) transfers a portion of a permitted site, the current discharger must also indicate the remaining permitted acreage after the transfer. Transfers do not require public notice.

3. *Modification of Coverage Form*

Permittees must notify Ecology regarding any changes to the information provided on the NOI by submitting an Update/Modification of Permit Coverage form in accordance with General Conditions G6 and G19. Examples of such changes include, but are not limited to:

- i. Changes to the Permittee's mailing address,
- ii. Changes to the on-site contact person information, and
- iii. Changes to the area/acreage affected by construction activity.

B. Public Notice

For new or previously unpermitted construction activities, the applicant must publish a public notice at least one time each week for two consecutive weeks, at least 7 days apart, in a newspaper with general circulation in the county where the construction is to take place. The notice must be run after the NOI has been submitted and must contain:

1. A statement that *“The applicant is seeking coverage under the Washington State Department of Ecology’s Construction Stormwater NPDES and State Waste Discharge General Permit.”*
2. The name, address, and location of the construction site.
3. The name and address of the applicant.
4. The type of construction activity that will result in a discharge (for example, residential construction, commercial construction, etc.), and the total number of acres to be disturbed over the lifetime of the project.
5. The name of the receiving water(s) (that is, the surface water(s) to which the site will discharge), or, if the discharge is through a storm sewer system, the name of the operator of the system and the receiving water(s) the system discharges to.
6. The statement: *Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology’s action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320. Comments can be submitted to: Department of Ecology, PO Box 47696, Olympia, Washington 98504-7696 Attn: Water Quality Program, Construction Stormwater.*

S3. COMPLIANCE WITH STANDARDS

- A. Discharges must not** cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), groundwater quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the Federal water quality criteria applicable to Washington. (40 CFR Part 131.45) Discharges that are not in compliance with these standards are prohibited.
- B. Prior to the discharge** of stormwater and non-stormwater to waters of the State, the Permittee must apply All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART). This includes the preparation and implementation of an adequate SWPPP, with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.
- C. Ecology presumes** that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:

1. Comply with all permit conditions, including; planning, sampling, monitoring, reporting, and recordkeeping conditions.
 2. Implement stormwater BMPs contained in stormwater management manuals published or approved by Ecology, or BMPs that are demonstrably equivalent to BMPs contained in stormwater management manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control. (For purposes of this section, the stormwater manuals listed in Appendix 10 of the *Phase I Municipal Stormwater Permit* are approved by Ecology.)
- D. Where construction sites** also discharge to groundwater, the groundwater discharges must also meet the terms and conditions of this CSWGP. Permittees who discharge to groundwater through an injection well must also comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

S4. MONITORING REQUIREMENTS, BENCHMARKS, AND REPORTING TRIGGERS

A. Site Log Book

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

B. Site Inspections

Construction sites one (1) acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a Certified Erosion and Sediment Control Lead (CESCL). Sites less than one (1) acre may have a person without CESCL certification conduct inspections. (See Special Conditions S4.B.3 and B.4, below, for detailed requirements of the Permittee's CESCL.)

Site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points under the Permittee's operational control.

1. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:
 - a. Site conditions and construction activities that could impact the quality of stormwater; and
 - b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL (sites one (1) acre or more) must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology. (See BMP C160 in the manual, referred to in Special Condition S9.C.1 and 2.)
2. The CESCL or inspector must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. BMP effectiveness must be evaluated to

determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

Based on the results of the inspection, the Permittee must correct the problems identified, by:

- a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.
 - b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs, within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
 - c. Documenting BMP implementation and maintenance in the site log book.
3. The CESCL or inspector must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one (1) day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one (1) inspection is required that week.) Inspection frequency may be reduced to once every calendar month for inactive sites that are temporarily stabilized.
4. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:
 - a. Inspection date and time.
 - b. Weather information.
 - c. The general conditions during inspection.
 - d. The approximate amount of precipitation since the last inspection.
 - e. The approximate amount of precipitation within the last 24 hours.
 - f. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.
 - g. A description of:
 - i. BMPs inspected (including location).
 - ii. BMPs that need maintenance and why.
 - iii. BMPs that failed to operate as designed or intended, and
 - iv. Where additional or different BMPs are needed, and why.
 - h. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.

- i. Any water quality monitoring performed during inspection.
- j. General comments and notes, including a brief description of any BMP repairs, maintenance, or installations made following the inspection.
- k. An implementation schedule for the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
- l. A summary report of the inspection.
- m. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement:
I certify that this report is true, accurate, and complete to the best of my knowledge and belief.

Table 3 Summary of Primary Monitoring Requirements

Size of Soil Disturbance ¹	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling ²	CESCL Required for Inspections?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method ³		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required ⁴	Required	Yes

¹ Soil disturbance is calculated by adding together all areas that will be affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

² If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of concrete or recycled concrete placed or poured over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH sampling in accordance with Special Condition S4.D.

³ Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.4.a or b.

⁴ Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.4.a.

C. Turbidity/Transparency Sampling Requirements

1. Sampling Methods

- a. If construction activity involves the disturbance of five (5) acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.4.a, below.
- b. If construction activity involves one (1) acre or more but fewer than five (5) acres of soil disturbance, the Permittee must conduct either transparency sampling *or* turbidity sampling per Special Condition S4.C.4.a or b, below.

2. Sampling Frequency

- a. The Permittee must sample all discharge points at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site); sampling is not required on sites that disturb less than an acre.
- b. Samples must be representative of the flow and characteristics of the discharge.
- c. Sampling is not required when there is no discharge during a calendar week.
- d. Sampling is not required outside of normal working hours or during unsafe conditions.
- e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).
- f. Sampling is not required before construction activity begins.
- g. The Permittee may reduce the sampling frequency for temporarily stabilized, inactive sites to once every calendar month.

3. Sampling Locations

- a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).
- b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.
- c. The Permittee must identify all sampling point(s) in the SWPPP and on the site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.
- d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.
- e. The Permittee may discontinue sampling at discharge points in areas of the project where the Permittee no longer has operational control of the construction activity.

4. Sampling and Analysis Methods

- a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTUs).
- b. The Permittee performs transparency analysis on site with a 1¾ inch diameter, 60 centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm).

Table 4 Monitoring and Reporting Requirements

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value
Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs
Transparency	Cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm

5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTUs. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information and follow S5.F – Noncompliance Notification for reporting requirements applicable to discharges which exceed the numeric effluent limit for turbidity.

- a. Turbidity 26 – 249 NTUs, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTUs; or if discharge transparency is 32 to 7 cm, the Permittee must:

- i. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs, and no later than 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
- ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- iii. Document BMP implementation and maintenance in the site log book.

- b. Turbidity 250 NTUs or greater, or Transparency 6 cm or less:

If a discharge point's turbidity is 250 NTUs or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive

management process described below. For discharges which are subject to a numeric effluent limit for turbidity, see S5.F – Noncompliance Notification.

- i. Within 24 hours, telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) number (or through Ecology's Water Quality Permitting Portal [WQWebPortal] – Permit Submittals when the form is available), in accordance with Special Condition S5.A.
 - **Central Region** (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490
 - **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
 - **Northwest Region** (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
 - **Southwest Region** (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

These numbers and a link to the ERTS reporting page are also listed at the following website: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>.

- ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
- iii. Sample discharges daily until:
 - a) Turbidity is 25 NTUs (or lower); or
 - b) Transparency is 33 cm (or greater); or
 - c) The Permittee has demonstrated compliance with the water quality standard for turbidity:
 - 1) No more than 5 NTUs over background turbidity, if background is less than 50 NTUs, or
 - 2) No more than 10% over background turbidity, if background is 50 NTUs or greater; or

*Note: background turbidity in the receiving water must be measured immediately upstream (upgradient) or outside of the area of influence of the discharge.
 - d) The discharge stops or is eliminated.
- iv. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within seven (7) days of the date the discharge exceeded the benchmark.

- v. Document BMP implementation and maintenance in the site log book.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with permit benchmarks.

D. pH Sampling Requirements – Significant Concrete Work or Engineered Soils

If construction activity results in the disturbance of 1 acre or more, *and* involves significant concrete work (significant concrete work means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer system that drains to surface waters of the State, the Permittee must conduct pH sampling as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH sampling results in the site log book.
2. During the applicable pH monitoring period defined below, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.
 - a. For sites with significant concrete work, the Permittee must begin the pH sampling period when the concrete is first placed or poured and exposed to precipitation, and continue weekly throughout and after the concrete placement, pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).
 - b. For sites with recycled concrete where monitoring is required, the Permittee must begin the weekly pH sampling period when the recycled concrete is first exposed to precipitation and must continue until the recycled concrete is fully stabilized with the stormwater pH in the range of 6.5 to 8.5 (su).
 - c. For sites with engineered soils, the Permittee must begin the pH sampling period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.
3. The Permittee must sample pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.
4. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:
 - a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters of the state; *or*
 - b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO₂) sparging, dry ice or food grade vinegar. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO₂ sparging, dry ice or food grade vinegar.

S5. REPORTING AND RECORDKEEPING REQUIREMENTS

A. High Turbidity Reporting

Anytime sampling performed in accordance with Special Condition S4.C indicates turbidity has reached the 250 NTUs or more (or transparency less than or equal to 6 cm), high turbidity reporting level, the Permittee must notify Ecology within 24 hours of analysis either by calling the applicable Ecology Region's Environmental Report Tracking System (ERTS) number by phone or by submitting an electronic ERTS report (through Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals when the form is available). See the CSWGP website for links to ERTS and the WQWebPortal. (<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>) Also, see phone numbers in Special Condition S4.C.5.b.i.

B. Discharge Monitoring Reports (DMRs)

Permittees required to conduct water quality sampling in accordance with Special Conditions S4.C (Turbidity/Transparency), S4.D (pH), S8 (303[d]/TMDL sampling), and/or G12 (Additional Sampling) must submit the results to Ecology.

Permittees must submit monitoring data using Ecology's WQWebDMR web application accessed through Ecology's Water Quality Permitting Portal.

Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR at:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

Permittees who obtain a waiver not to use WQWebDMR must use the forms provided to them by Ecology; submittals must be mailed to the address above. Permittees must submit DMR forms to be received by Ecology within 15 days following the end of each month.

If there was no discharge during a given monitoring period, all Permittees must submit a DMR as required with "no discharge" entered in place of the monitoring results. DMRs are required for the full duration of permit coverage (from the first full month following the effective date of permit coverage up until Ecology has approved termination of the coverage). For more information, contact Ecology staff using information provided at the following website: www.ecy.wa.gov/programs/wq/permits/paris/contacts.html.

C. Records Retention

The Permittee must retain records of all monitoring information (site log book, sampling results, inspection reports/checklists, etc.), Stormwater Pollution Prevention Plan, copy of the permit coverage letter (including Transfer of Coverage documentation) and any other documentation of compliance with permit requirements for the entire life of the construction project and for a minimum of five (5) years following the termination of permit coverage. Such information must include all calibration and maintenance records, and records of all data used to complete the application for this permit. This period of retention must be extended during

the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

D. Recording Results

For each measurement or sample taken, the Permittee must record the following information:

1. Date, place, method, and time of sampling or measurement.
2. The first and last name of the individual who performed the sampling or measurement.
3. The date(s) the analyses were performed.
4. The first and last name of the individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee samples or monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S4 of this permit, the sampling results for this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

F. Noncompliance Notification

In the event the Permittee is unable to comply with any part of the terms and conditions of this permit, and the resulting noncompliance may cause a threat to human health or the environment (such as but not limited to spills or fuels or other materials, catastrophic pond or slope failure, and discharges that violate water quality standards), or exceed numeric effluent limitations (see S8 – Discharges to 303(d) or TMDL Waterbodies), the Permittee must, upon becoming aware of the circumstance:

1. Notify Ecology within 24 hours of the failure to comply by calling the applicable Regional office ERTS phone number (refer to Special Condition S4.C.5.b.i, or go to <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue> to find contact information for the regional offices.)
2. Immediately take action to prevent the discharge/pollution, or otherwise stop or correct the noncompliance, and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within five (5) days of becoming aware of the violation (See S5.F.3, below, for details on submitting results in a report).
3. Submit a detailed written report to Ecology within five (5) days of the time the Permittee becomes aware of the circumstances, unless requested earlier by Ecology. The report must be submitted using Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals, unless a waiver from electronic reporting has been granted according to S5.B. The report must contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Permittee must report any unanticipated bypass and/or upset that exceeds any effluent limit in the permit in accordance with the 24-hour reporting requirement contained in 40 C.F.R. 122.41(l)(6).

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply. Upon request of the Permittee, Ecology may waive the requirement for a written report on a case-by-case basis, if the immediate notification is received by Ecology within 24 hours.

G. Access to Plans and Records

1. The Permittee must retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator or for on-site review by Ecology or the local jurisdiction:
 - a. General Permit
 - b. Permit Coverage Letter
 - c. Stormwater Pollution Prevention Plan (SWPPP)
 - d. Site Log Book
 - e. Erosivity Waiver (if applicable)
2. The Permittee must address written requests for plans and records listed above (Special Condition S5.G.1) as follows:
 - a. The Permittee must provide a copy of plans and records to Ecology within 14 days of receipt of a written request from Ecology.
 - b. The Permittee must provide a copy of plans and records to the public when requested in writing. Upon receiving a written request from the public for the Permittee's plans and records, the Permittee must either:
 - i. Provide a copy of the plans and records to the requester within 14 days of a receipt of the written request; *or*
 - ii. Notify the requester within 10 days of receipt of the written request of the location and times within normal business hours when the plans and records may be viewed; and provide access to the plans and records within 14 days of receipt of the written request; *or*

Within 14 days of receipt of the written request, the Permittee may submit a copy of the plans and records to Ecology for viewing and/or copying by the requester at an Ecology office, or a mutually agreed location. If plans and records are viewed and/or copied at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which a reasonable fee may be charged. The Permittee must notify the requester within 10 days of receipt of the request where the plans and records may be viewed and/or copied.

S6. PERMIT FEES

The Permittee must pay permit fees assessed by Ecology. Fees for stormwater discharges covered under this permit are established by Chapter 173-224 WAC. Ecology continues to assess permit fees until the permit is terminated in accordance with Special Condition S10 or revoked in accordance with General Condition G5.

S7. SOLID AND LIQUID WASTE DISPOSAL

The Permittee must handle and dispose of solid and liquid wastes generated by construction activity, such as demolition debris, construction materials, contaminated materials, and waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, in accordance with:

- A. Special Condition S3, Compliance with Standards.
- B. WAC 173-216-110.
- C. Other applicable regulations.

S8. DISCHARGES TO 303(d) OR TMDL WATERBODIES

A. Sampling and Numeric Effluent Limits For Certain Discharges to 303(d)-Listed Water Bodies

1. Permittees who discharge to segments of water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorus, must conduct water quality sampling according to the requirements of this section, and Special Conditions S4.C.2.b-f and S4.C.3.b-d, and must comply with the applicable numeric effluent limitations in S8.C and S8.D.
2. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters (Category 5) that exists on January 1, 2021, or the date when the operator's complete permit application is received by Ecology, whichever is later.

B. Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters

Construction sites that discharge to a TMDL or 303(d)-listed waterbody are not eligible for coverage under this permit *unless* the operator:

1. Prevents exposing stormwater to pollutants for which the waterbody is impaired, and retains documentation in the SWPPP that details procedures taken to prevent exposure on site; *or*
2. Documents that the pollutants for which the waterbody is impaired are not present at the site, and retains documentation of this finding within the SWPPP; *or*
3. Provides Ecology with data indicating the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrate:
 - a. For discharges to waters without an EPA-approved or -established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; *or*
 - b. For discharges to waters with an EPA-approved or -established TMDL, that there is sufficient remaining wasteload allocation in the TMDL to allow construction stormwater discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

Operators of construction sites are eligible for coverage under this permit only after Ecology makes an affirmative determination that the *discharge will not cause or contribute to the existing impairment or exceed the TMDL*.

C. Sampling and Numeric Effluent Limits for Discharges to Water Bodies on the 303(d) List for Turbidity, Fine Sediment, or Phosphorus

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus must conduct turbidity sampling in accordance with Special Condition S4.C.2 and comply with either of the numeric effluent limits noted in Table 5 below.
2. As an alternative to the 25 NTUs effluent limit noted in Table 5 below (applied at the point where stormwater [or authorized non-stormwater] is discharged off-site), Permittees may choose to comply with the surface water quality standard for turbidity. The standard is: no more than 5 NTUs over background turbidity when the background turbidity is 50 NTUs or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTUs. In order to use the water quality standard requirement, the sampling must take place at the following locations:
 - a. Background turbidity in the 303(d)-listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.
 - b. Turbidity at the point of discharge into the 303(d)-listed receiving water, inside the area of influence of the discharge.
3. Discharges that exceed the numeric effluent limit for turbidity constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

Table 5 Turbidity, Fine Sediment & Phosphorus Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled	Unit	Analytical Method	Sampling Frequency	Numeric Effluent Limit ¹
<ul style="list-style-type: none"> Turbidity Fine Sediment Phosphorus 	Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs, at the point where stormwater is discharged from the site; <i>OR</i> In compliance with the surface water quality standard for turbidity (S8.C.2.a)

¹ Permittees subject to a numeric effluent limit for turbidity may, at their discretion, choose either numeric effluent limitation based on site-specific considerations including, but not limited to, safety, access and convenience.

D. Discharges to Water Bodies on the 303(d) List for High pH

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for high pH must conduct pH sampling in accordance with the table below, and comply with the numeric effluent limit of pH 6.5 to 8.5 su (Table 6).

Table 6 pH Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled/Units	Analytical Method	Sampling Frequency	Numeric Effluent Limit
High pH	pH /Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5 su

2. At the Permittee's discretion, compliance with the limit shall be assessed at one of the following locations:
 - a. Directly in the 303(d)-listed waterbody segment, inside the immediate area of influence of the discharge; *or*
 - b. Alternatively, the Permittee may measure pH at the point where the discharge leaves the construction site, rather than in the receiving water.
3. Discharges that exceed the numeric effluent limit for pH (outside the range of 6.5 – 8.5 su) constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

E. Sampling and Limits for Sites Discharging to Waters Covered by a TMDL or another Pollution Control Plan

1. Discharges to a waterbody that is subject to a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus must be consistent with the TMDL. Refer to <http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html> for more information on TMDLs.
 - a. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges must be consistent with any specific waste load allocations or requirements established by the applicable TMDL.
 - i. The Permittee must sample discharges weekly, unless otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.
 - ii. Analytical methods used to meet the monitoring requirements must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.
 - iii. Turbidity and pH methods need not be accredited or registered unless conducted at a laboratory which must otherwise be accredited or registered.
 - b. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but has not identified specific requirements, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
 - c. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
 - d. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

S9. STORMWATER POLLUTION PREVENTION PLAN

The Permittee must prepare and properly implement an adequate Stormwater Pollution Prevention Plan (SWPPP) for construction activity in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

A. The Permittee's SWPPP must meet the following objectives:

1. To identify best management practices (BMPs) which prevent erosion and sedimentation, and to reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.
2. To prevent violations of surface water quality, groundwater quality, or sediment management standards.
3. To control peak volumetric flow rates and velocities of stormwater discharges.

B. General Requirements

1. The SWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:
 - a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).
 - b. Potential erosion problem areas.
 - c. The 13 elements of a SWPPP in Special Condition S9.D.1-13, including BMPs used to address each element.
 - d. Construction phasing/sequence and general BMP implementation schedule.
 - e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.
 - f. Engineering calculations for ponds, treatment systems, and any other designed structures. When a treatment system requires engineering calculations, these calculations must be included in the SWPPP. Engineering calculations do not need to be included in the SWPPP for treatment systems that do not require such calculations.
2. The Permittee must modify the SWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:
 - a. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the inspection or investigation.
 - b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
 - c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with:

1. *Stormwater Management Manual for Western Washington* (most current approved edition at the time this permit was issued), for sites west of the crest of the Cascade Mountains; *or*

2. *Stormwater Management Manual for Eastern Washington* (most current approved edition at the time this permit was issued), for sites east of the crest of the Cascade Mountains; *or*
3. Revisions to the manuals listed in Special Condition S9.C.1 & 2, or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; *or*
4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable stormwater management manuals, including:
 - a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.
 - b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. SWPPP – Narrative Contents and Requirements

The Permittee must include each of the 13 elements below in Special Condition S9.D.1-13 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits
 - a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.
 - b. Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum degree practicable.
2. Establish Construction Access
 - a. Limit construction vehicle access and exit to one route, if possible.
 - b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.
 - c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
 - d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.
 - e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d.
 - f. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.

3. Control Flow Rates

- a. Protect properties and waterways downstream of construction sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.
- b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater infiltration or detention BMPs as one of the first steps in grading. Assure that detention BMPs function properly before constructing site improvements (for example, impervious surfaces).
- c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from sedimentation during the construction phase.

4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must:

- a. Construct sediment control BMPs (sediment ponds, traps, filters, infiltration facilities, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.
- b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.
- c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.
- d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.
- e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.
- f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

- a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion

control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control.

- b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.
- c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.
- d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion.

West of the Cascade Mountains Crest

During the dry season (May 1 - September 30): 7 days

During the wet season (October 1 - April 30): 2 days

East of the Cascade Mountains Crest, except for Central Basin*

During the dry season (July 1 - September 30): 10 days

During the wet season (October 1 - June 30): 5 days

The Central Basin*, East of the Cascade Mountains Crest

During the dry Season (July 1 - September 30): 30 days

During the wet season (October 1 - June 30): 15 days

***Note: The Central Basin** is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

- e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.
- f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.
- g. The Permittee must minimize the amount of soil exposed during construction activity.
- h. The Permittee must minimize the disturbance of steep slopes.
- i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.

6. Protect Slopes

- a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).
- b. The Permittee must divert off-site stormwater (run-on) or groundwater away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
- c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.

- i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."
 - ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
- d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.
- e. Place check dams at regular intervals within constructed channels that are cut down a slope.
- 7. Protect Drain Inlets
 - a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
 - b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
- 8. Stabilize Channels and Outlets
 - a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:
 - i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."
 - ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
 - b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.

9. Control Pollutants

Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

- a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.
- b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. Minimize storage of hazardous materials on-site. Safety Data Sheets (SDS) should be supplied for all materials stored. Chemicals should be kept in their original labeled containers. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume of the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.
- c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.
- d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.
- e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.
- f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, recycled concrete stockpiles, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A – Definitions.)
- g. Adjust the pH of stormwater or authorized non-stormwater if necessary to prevent an exceedance of groundwater and/or surface water quality standards.
- h. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete truck drums onto the ground, or into storm drains, open ditches, streets, or streams. Washout of small concrete handling equipment may be disposed of in a formed area awaiting concrete where it will not contaminate surface or groundwater. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge directly to groundwater or surface waters of the State is

prohibited. At no time shall concrete be washed off into the footprint of an area where an infiltration BMP will be installed.

- i. Obtain written approval from Ecology before using any chemical treatment, with the exception of CO₂, dry ice or food grade vinegar, to adjust pH.
- j. Uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations may be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters. Prior to infiltration, water from water-only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).

10. Control Dewatering

- a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, in conjunction with BMPs to reduce sedimentation before discharge to a sediment trap or sediment pond.
- b. Permittees may discharge clean, non-turbid dewatering water, such as well-point groundwater, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that “surface waters of the State” may exist on a construction site as well as off site; for example, a creek running through a site.
- c. Other dewatering treatment or disposal options may include:
 - i. Infiltration
 - ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
 - iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies (See S9.D.9.i, regarding chemical treatment written approval).
 - iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.
 - v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.
- d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

- a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.
- b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

- a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.
- b. Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.
- c. Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4, and S9.

13. Protect Low Impact Development (LID) BMPs

The primary purpose of on-site LID Stormwater Management is to reduce the disruption of the natural site hydrology through infiltration. LID BMPs are permanent facilities.

- a. Permittees must protect all LID BMPs (including, but not limited to, Bioretention and Rain Garden facilities) from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the BMPs to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden bioretention/ rain garden soils, and replacing the removed soils with soils meeting the design specification.
- b. Permittees must maintain the infiltration capabilities of LID BMPs by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.
- c. Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements or base materials.
- d. Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.
- e. Permittees must keep all heavy equipment off existing soils under LID BMPs that have been excavated to final grade to retain the infiltration rate of the soils.

E. SWPPP – Map Contents and Requirements

The Permittee's SWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The SWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions.

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.

3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the SWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface waterbody, including wetlands.
9. Location of water quality sampling station(s), if sampling is required by state or local permitting authority.
10. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
11. Location or proposed location of LID facilities.

S10. NOTICE OF TERMINATION

Partial terminations of permit coverage are not authorized.

A. The site is eligible for termination of coverage when it has met any of the following conditions:

1. The site has undergone final stabilization, the Permittee has removed all temporary BMPs (except biodegradable BMPs clearly manufactured with the intention for the material to be left in place and not interfere with maintenance or land use), and all stormwater discharges associated with construction activity have been eliminated; *or*
2. All portions of the site that have not undergone final stabilization per Special Condition S10.A.1 have been sold and/or transferred (per Special Condition S2.A), and the Permittee no longer has operational control of the construction activity; *or*
3. For residential construction only, the Permittee has completed temporary stabilization and the homeowners have taken possession of the residences.

B. When the site is eligible for termination, the Permittee must submit a complete and accurate Notice of Termination (NOT) form, signed in accordance with General Condition G2, to:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

When an electronic termination form is available, the Permittee may choose to submit a complete and accurate Notice of Termination (NOT) form through the Water Quality Permitting Portal rather than mailing a hardcopy as noted above.

The termination is effective on the 31st calendar day following the date Ecology receives a complete NOT form, unless Ecology notifies the Permittee that termination request is denied because the Permittee has not met the eligibility requirements in Special Condition S10.A.

Permittees are required to comply with all conditions and effluent limitations in the permit until the permit has been terminated.

Permittees transferring the property to a new property owner or operator/Permittee are required to complete and submit the Notice of Transfer form to Ecology, but are not required to submit a Notice of Termination form for this type of transaction.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this general permit. Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit must constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

- A. All permit applications must bear a certification of correctness to be signed:
 - 1. In the case of corporations, by a responsible corporate officer.
 - 2. In the case of a partnership, by a general partner of a partnership.
 - 3. In the case of sole proprietorship, by the proprietor.
 - 4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology (including NOIs, NOTs, and Transfer of Coverage forms) must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to Ecology.
 - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.
- C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G2.B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A.** To enter upon the premises where a discharge is located or where any records are kept under the terms and conditions of this permit.
- B.** To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C.** To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D.** To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

- A.** When a change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.
- B.** When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this permit.
- C.** When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved, or
- D.** When information is obtained that indicates cumulative effects on the environment from dischargers covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

Pursuant to Chapter 43.21B RCW and Chapter 173-226 WAC, the Director may terminate coverage for any discharger under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

- A.** Violation of any term or condition of this permit.
- B.** Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
- C.** A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- D.** Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- E.** A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations.
- F.** Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.

- G.** Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

The Director may require any discharger under this permit to apply for and obtain coverage under an individual permit or another more specific general permit. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application, or a supplement to the previous application, whenever a material change to the construction activity or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application must be submitted at least sixty (60) days prior to any proposed changes. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit will be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. The Permittee must reapply using the electronic application form (NOI) available on Ecology's website. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

G9. REMOVED SUBSTANCE

The Permittee must not re-suspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G14. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Special Condition S5.F, and; 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G15. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G16. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G17. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G18. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four (4) years, or both.

G19. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, give notice to Ecology of planned physical alterations, modifications or additions to the permitted construction activity. The Permittee should be aware that, depending on the nature and size of the changes to the original permit, a new public notice and other permit process requirements may be required. Changes in activities that require reporting to Ecology include those that will result in:

- A.** The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
- B.** A significant change in the nature or an increase in quantity of pollutants discharged, including but not limited to: a 20% or greater increase in acreage disturbed by construction activity.
- C.** A change in or addition of surface water(s) receiving stormwater or non-stormwater from the construction activity.
- D.** A change in the construction plans and/or activity that affects the Permittee's monitoring requirements in Special Condition S4.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G20. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it must promptly submit such facts or information.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least forty-five (45) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of

operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G22. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

Any discharger authorized by this permit may request to be excluded from coverage under the general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons will fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director will either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to the construction stormwater general permit, the applicability of the construction stormwater general permit to that Permittee is automatically terminated on the effective date of the individual permit.

G23. APPEALS

- A.** The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal by any person within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B.** The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.
- C.** The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

G24. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G25. BYPASS PROHIBITED

A. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the design criteria for stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3 or 4) is applicable.

- 1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable stormwater management manual.
- 2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
 - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. Ecology is properly notified of the bypass as required in Special Condition S5.F of this permit.
4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

- a. A description of the bypass and its cause
 - b. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
 - c. A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
 - d. The minimum and maximum duration of bypass under each alternative.
 - e. A recommendation as to the preferred alternative for conducting the bypass.
 - f. The projected date of bypass initiation.
 - g. A statement of compliance with SEPA.
 - h. A request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated.
 - i. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
5. For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during

preparation of the Stormwater Pollution Prevention Plan (SWPPP) and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following before issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve, conditionally approve, or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

B. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

APPENDIX A – DEFINITIONS

AKART is an acronym for “All Known, Available, and Reasonable methods of prevention, control, and Treatment.” AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants and controlling pollution associated with a discharge.

Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which was completed and approved by EPA before January 1, 2021, or before the date the operator’s complete permit application is received by Ecology, whichever is later. TMDLs completed after a complete permit application is received by Ecology become applicable to the Permittee only if they are imposed through an administrative order by Ecology, or through a modification of permit coverage.

Applicant means an *operator* seeking coverage under this permit.

Benchmark means a pollutant concentration used as a permit threshold, below which a pollutant is considered unlikely to cause a water quality violation, and above which it may. When pollutant concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not water quality standards and are not numeric effluent limitations; they are indicator values.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control stormwater associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Buffer means an area designated by a local jurisdiction that is contiguous to and intended to protect a sensitive area.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Calendar Day A period of 24 consecutive hours starting at 12:00 midnight and ending the following 12:00 midnight.

Calendar Week (same as **Week**) means a period of seven consecutive days starting at 12:01 a.m. (0:01 hours) on Sunday.

Certified Erosion and Sediment Control Lead (CESCL) means a person who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (See BMP C160 in the SWMM).

Chemical Treatment means the addition of chemicals to stormwater and/or authorized non-stormwater prior to filtration and discharge to surface waters.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Common Plan of Development or Sale means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining permit requirements.

Composite Sample means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots).

Concrete Wastewater means any water used in the production, pouring and/or clean-up of concrete or concrete products, and any water used to cut, grind, wash, or otherwise modify concrete or concrete products. Examples include water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing). When stormwater comes in contact with concrete wastewater, the resulting water is considered concrete wastewater and must be managed to prevent discharge to waters of the State, including groundwater.

Construction Activity means land disturbing operations including clearing, grading or excavation which disturbs the surface of the land (including off-site disturbance acreage related to construction-support activity). Such activities may include road construction, construction of residential houses, office buildings, or industrial buildings, site preparation, soil compaction, movement and stockpiling of topsoils, and demolition activity.

Construction Support Activity means off-site acreage that will be disturbed as a direct result of the construction project and will discharge stormwater. For example, off-site equipment staging yards, material storage areas, borrow areas, and parking areas.

Contaminant means any hazardous substance that does not occur naturally or occurs at greater than natural background levels. See definition of "hazardous substance" and WAC 173-340-200.

Contaminated soil means soil which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

Contaminated groundwater means groundwater which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

Demonstrably Equivalent means that the technical basis for the selection of all stormwater BMPs is documented within a SWPPP, including:

1. The method and reasons for choosing the stormwater BMPs selected.
2. The pollutant removal performance expected from the BMPs selected.

3. The technical basis supporting the performance claims for the BMPs selected, including any available data concerning field performance of the BMPs selected.
4. An assessment of how the selected BMPs will comply with state water quality standards.
5. An assessment of how the selected BMPs will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment (AKART).

Department means the Washington State Department of Ecology.

Detention means the temporary storage of stormwater to improve quality and/or to reduce the mass flow rate of discharge.

Dewatering means the act of pumping groundwater or stormwater away from an active construction site.

Director means the Director of the Washington State Department of Ecology or his/her authorized representative.

Discharger means an owner or operator of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such groundwater infiltration or surface waters as may be present.

Ecology means the Washington State Department of Ecology.

Engineered Soils means the use of soil amendments including, but not limited, to Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to surface water or to groundwater than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, sediment traps, and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Federal Operator is an entity that meets the definition of “Operator” in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

Final Stabilization (same as **fully stabilized** or **full stabilization**) means the completion of all soil disturbing activities at the site and the establishment of permanent vegetative cover, or equivalent permanent stabilization measures (such as pavement, riprap, gabions, or geotextiles) which will prevent erosion. See the applicable Stormwater Management Manual for more information on vegetative cover expectations and equivalent permanent stabilization measures.

Groundwater means water in a saturated zone or stratum beneath the land surface or a surface waterbody.

Hazardous Substance means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous sub-stance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

Injection Well means a well that is used for the subsurface emplacement of fluids. (See **Well**.)

Jurisdiction means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this general permit pursuant to WAC 173-226-200.

Notice of Termination (NOT) means a request for termination of coverage under this general permit as specified by Special Condition S10 of this permit.

Operator means any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Permittee means individual or entity that receives notice of coverage under this general permit.

pH means a liquid's measure of acidity or alkalinity. A pH of 7 is defined as neutral. Large variations above or below this value are considered harmful to most aquatic life.

pH Monitoring Period means the time period in which the pH of stormwater runoff from a site must be tested a minimum of once every seven days to determine if stormwater pH is between 6.5 and 8.5.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which pollutants are or may be discharged to surface waters of the State. This term does not include return flows from irrigated agriculture. (See the Fact Sheet for further explanation)

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the CWA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the CWA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the State; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the State as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process Wastewater means any non-stormwater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. If stormwater commingles with process wastewater, the commingled water is considered process wastewater.

Receiving Water means the waterbody at the point of discharge. If the discharge is to a storm sewer system, either surface or subsurface, the receiving water is the waterbody to which the storm system discharges. Systems designed primarily for other purposes such as for groundwater drainage, redirecting stream natural flows, or for conveyance of irrigation water/return flows that coincidentally convey stormwater are considered the receiving water.

Representative means a stormwater or wastewater sample which represents the flow and characteristics of the discharge. Representative samples may be a grab sample, a time-proportionate *composite sample*, or a flow proportionate sample. Ecology's Construction Stormwater Monitoring Manual provides guidance on representative sampling.

Responsible Corporate Officer for the purpose of signatory authority means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sanitary Sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

Sensitive Area means a waterbody, wetland, stream, aquifer recharge area, or channel migration zone.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Significant Amount means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a reasonable potential to cause a violation of surface or groundwater quality or sediment management standards.

Significant Concrete Work means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project.

Significant Contributor of Pollutants means a facility determined by Ecology to be a contributor of a significant amount(s) of a pollutant(s) to waters of the State of Washington.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source Control BMPs means physical, structural or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as, temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm Drain means any drain which drains directly into a *storm sewer system*, usually found along roadways or in parking lots.

Storm Sewer System means a means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying stormwater. This does not include systems which are part of a *combined sewer* or Publicly Owned Treatment Works (POTW), as defined at 40 CFR 122.2.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

Stormwater Management Manual (SWMM) or Manual means the technical Manual published by Ecology for use by local governments that contain descriptions of and design criteria for BMPs to prevent, control, or treat pollutants in stormwater.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Temporary Stabilization means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent “final stabilization.”

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The TMDL calculations must include a "margin of safety" to ensure that the waterbody can be protected in case there are unforeseen events or unknown sources of the pollutant. The calculation must also account for seasonable variation in water quality.

Transfer of Coverage (TOC) means a request for transfer of coverage under this general permit as specified by Special Condition S2.A of this permit.

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

Transparency means a measurement of water clarity in centimeters (cm), using a 60 cm transparency tube. The transparency tube is used to estimate the relative clarity or transparency of water by noting the depth at which a black and white Secchi disc becomes visible when water is released from a value in the bottom of the tube. A transparency tube is sometimes referred to as a “turbidity tube.”

Turbidity means the clarity of water expressed as nephelometric turbidity units (NTUs) and measured with a calibrated turbidimeter.

Uncontaminated means free from any contaminant. See definition of “contaminant” and WAC 173-340-200.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waste Load Allocation (WLA) means the portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2[h]).

Water-Only Based Shaft Drilling is a shaft drilling process that uses water only and no additives are involved in the drilling of shafts for construction of building, road, or bridge foundations.

Water Quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt

waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Well means a bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension. (See **Injection Well**.)

Wheel Wash Wastewater means any water used in, or resulting from the operation of, a tire bath or wheel wash (BMP C106: Wheel Wash), or other structure or practice that uses water to physically remove mud and debris from vehicles leaving a construction site and prevent track-out onto roads. When stormwater comes in contact with wheel wash wastewater, the resulting water is considered wheel wash wastewater and must be managed according to Special Condition S9.D.9.

APPENDIX B – ACRONYMS

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
CESCL	Certified Erosion and Sediment Control Lead
CFR	Code of Federal Regulations
CKD	Cement Kiln Dust
cm	Centimeters
CPD	Common Plan of Development
CTB	Cement-Treated Base
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
FR	Federal Register
LID	Low Impact Development
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UIC	Underground Injection Control
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality
WWHM	Western Washington Hydrology Model



Instructions for Transfer of Coverage

Construction Stormwater General Permit

Instructions

This form is used to process two types of permit transfers: 1) Complete Transfer, or 2) Partial Transfer. Determine which type of transfer applies to your situation before filling out this form.

1. Complete Transfer: The original permittee has sold, or otherwise released control of the entire site to another party.

Required Paperwork for Complete Transfer:

- Either the current permittee, or the new permittee(s), must submit a complete and accurate Transfer of Coverage form to Ecology for each new party. The form must be signed by the current permittee **and** the new permittee.

2. Partial Transfer: The original permittee retains control over some portion of the site after selling or releasing control over a portion of the site.

Required Paperwork for Partial Transfer

- Either the current permittee or the new permittee(s) must submit a complete and accurate Transfer of Coverage Form for each new operator to Ecology. The form must be signed by the current permittee and the new permittee.
- For partial transfers, once all transfers are submitted, the original permittee should submit the Notice of Termination only if the portion(s) they still own or control have undergone final stabilization and meet the criteria for termination.

For Your Information

- When this form is 1) completed, 2) signed by the current and new permittee, and 3) submitted to Ecology, permit transfers are effective on the date specified at the top of page 1 (unless Ecology notifies the current permittee and new permittee of its intention to revoke coverage under the General Permit or if Ecology sends notice that the application is incomplete). If no date for the transfer of coverage is specified, Ecology will use the date of the last signature.
- The new permittee should keep a copy of the signed Transfer of Coverage form (which serves as proof of permit coverage) until Ecology sends documentation in the mail.
- Following the transfer, the new permittee must either: (1) use the Stormwater Pollution Prevention Plan (SWPPP) developed by the original operator, and modified as necessary, or (2) develop and use a new SWPPP that meets the requirements of the Construction Stormwater General Permit.
- For projects for which the original permittee has completed a Proposed New Discharge to an Impaired Waterbody Form (ECY 070-399), or for projects that are operating on sites with soil or groundwater contamination: Upon completion of the Transfer of Coverage form, the new permittee will adopt any special provisions made to protect water quality for sites that have existing contamination or that discharge to an impaired waterbody.

To request ADA accommodation including materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call 877-833-6341.



Transfer of Coverage

Permit # WAR_____

Construction Stormwater General Permit

This form transfers permit coverage for all, or a portion of a site to one or more new operators.

Type of permit transfer (check one): ☐ Partial transfer (complete the Partial Transfer acreage below) ☐ Complete transfer

Specific date that permit responsibility, coverage, and liability is transferred to new operator: _____

**If no date is indicated Ecology will determine the date of transfer.*

Please see instructions for details on type of transfer.

For PARTIAL TRANSFERS indicate the acreage remaining under your operational control:

- List **total size of project/site** remaining under your operational control following the **partial transfer**: _____ acres.
- List **total area of soil disturbance** remaining under your operational control following the **partial transfer**: _____ acres.
- Submitting this form meets the requirement to submit an updated NOI (General Permit Condition G9)

Current Operator/Permittee Information

Current Operator/Permittee Name:		Company:		
Business Phone:	Ext:	Mailing Address:		
Cell Phone:	Fax (optional):			
Email:		City:	State:	Zip+4:
Signature* (see signatory requirements in Section VIII):		Title:		
		Date:		

New Operator/Permittee Information

(the remainder of this form applies to the **new** Operator/Permittee)

I. New Operator/Permittee (Party with operational control over plans and specifications or day-to-day operational control of activities which ensure compliance with Stormwater Pollution Prevention Plan (SWPPP) and permit conditions. Ecology will send correspondence and permit fee invoices to the permittee on record.)				
Name:		Company:		
Business Phone:	Ext:	Unified Business Identifier (UBI): <i>(UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)</i>		
Cell Phone (Optional):	Fax (Optional):	E-mail:		
Mailing Address:		City:	State:	Zip + 4:
II. Property Owner (The party listed on the County Assessor's records as owner and taxpayer of the parcel[s] for which permit coverage is requested. Ecology will not send correspondence and permit fee invoices to the Property Owner. The Property Owner information will be used for emergency contact purposes.)				
Name:		Company:		
Business Phone:	Ext:	Unified Business Identifier (UBI): <i>(UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)</i>		
Cell Phone (Optional):	Fax (Optional):	E-mail:		
Mailing Address:		City:	State:	Zip + 4:

III. On-Site Contact Person(s) (Typically the Certified Erosion and Sediment Control Lead or Operator/Permittee)				
Name:		Company:		
Business Phone:	Ext:	Mailing Address:		
Cell Phone:	Fax(Optional):	City:	State:	Zip+4:
Email:				
IV. Site/Project Information				
Site or Project Name <hr/> Street Address or Location Description (<i>If the site lacks a street address, list its specific location. For example, Intersection of Highway 61 and 34.</i>) <hr/> Parcel ID#: _____ (Optional) Type of Construction Activity (<i>check all that apply</i>): <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Highway or Road (city ,county, state) <input type="checkbox"/> Utilities (specify): _____ <input type="checkbox"/> Other (specify): _____		Site Acreage Total size of your site/project (that you own/control): _____ acres. <i>(Note: 1 acre = 43,560 sq. ft.)</i> Total area of soil disturbance for your site/project over the life of the project: _____ acres. Include grading, equipment staging, excavation, borrow pit, material storage areas, dump areas, haul roads, side-cast areas, off-site construction support areas, and all other soil disturbance acreage associated with the project. (Note: 1 acre = 43,560 sq. ft.)		
City (or nearest city):	Zip Code:	Estimated project start-up date (mm/dd/yy):		
County:		Estimated project completion date (mm/dd/yy):		
Record the latitude and longitude of the <i>main entrance</i> to the site or the approximate center of site.				
Latitude: _____ °N		Longitude: _____ °W		
V. Existing Site Conditions				
1. Are you aware of contaminated soils present on the site? <input type="checkbox"/> Yes <input type="checkbox"/> No 2. Are you aware of groundwater contamination located within the site boundary? <input type="checkbox"/> Yes <input type="checkbox"/> No 3. If you answered yes to questions 1 or 2, will any contaminated soils be disturbed or will any contaminated groundwater be discharged due to the proposed construction activity? <input type="checkbox"/> Yes <input type="checkbox"/> No ("Contaminated" and "contamination" here mean containing any hazardous substance (as defined in WAC 173-340-200) that does not occur naturally or occurs at greater than natural background levels.) If you answered yes to Question 3, please provide detailed information with the NOI (as known and readily available) on the natures and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment Best Management Practices (BMPs) proposed to control the discharge of soil and/or groundwater contaminants in stormwater. This should include information that would be included in related portions of the Stormwater Pollution Prevention Plan (SWPPP) that describe how contaminated and potentially contaminated construction stormwater and dewatering water will be managed.				

VI. WQWebDMR (Electronic Discharge Monitoring Reporting)

You must submit monthly discharge monitoring reports using Ecology's WQWebDMR system. To sign up for WQWebDMR, or to register a new site, go to <https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance>. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. To have the ability to use the system immediately, **you must submit the Electronic Signature Agreement with your transfer of coverage form**. If you have questions on this process, contact Ecology's WQWebDMR staff at WebDMRPortal@ecy.wa.gov or 800/633-6193 or 360-407-7097 (local). Note: DMRs are optional for permitted sites under 1 acre that do not discharge to impaired waterbodies.

VII. Discharge/Receiving Water Information

Indicate whether your site's stormwater and/or dewatering water could enter surface waters, ***directly and/or indirectly***.

☐ Water will discharge directly or indirectly (through a storm drain system or roadside ditch) into one or more surface waterbodies (wetlands, creeks, lakes, and all other surface waters and water courses).

If your discharge is to a storm sewer system, provide the name of the operator of the storm sewer system:
(e.g., City of Tacoma): _____

☐ Water will discharge to ground with 100% infiltration, with no potential to reach surface waters under any conditions.

If your project includes dewatering, you **must** include dewatering plans and discharge locations in your site Stormwater Pollution Prevention Plan.

Location of Outfall into Surface Waterbody

Enter the outfall identifier code, waterbody name, and latitude/longitude of the point(s) where the site has the potential to discharge into a waterbody (the outfall). Enter all locations. **See illustration of Surface Waterbody Outfall locations at the end of this form.**

- Include the names and locations of both direct and indirect discharges to surface waterbodies, even if the risk of discharge is low or limited to periods of extreme weather. **Attach a separate list if necessary.**
- Give each point a unique 1-4 digit alpha numeric code. This code will be used for identifying these points in WQWebDMR.
- Some large construction projects (for example, subdivisions, roads, or pipelines) may discharge into several waterbodies.
- If the creek or tributary is unnamed, use a format such as "unnamed tributary to Deschutes River."
- If the site discharges to a stormwater conveyance system that in turn flows to a surface waterbody, include the surface waterbody name and location.

Outfall Identifier Code. These cannot be symbols. (Maximum of 4 characters).				Surface Waterbody Name at the Outfall	Latitude Decimal Degrees	Longitude Decimal Degrees
Example: 001A				Example: Puget Sound	47.5289247° N	-122.3123550° W
					° N	° W
					° N	° W
					° N	° W

If your site discharges to a waterbody that is on the impaired waterbodies list (e.g., 303[d] list) for turbidity, fine sediment, high pH, or phosphorus, Ecology will require additional documentation before issuing permit coverage and these sites will be subject to additional sampling and numeric effluent limits (per Permit Condition S8). Ecology will notify you if any additional sampling requirements apply. Information on impaired waterbodies is available online at: <https://www.ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d>.

Before signing, please use the following checklist to ensure this form is complete:

- ☐ All spaces on this form have been completed. (Attach additional sheets if necessary)
- ☐ The transfer form has been signed by both the current permittee (see Page 1) **and** the new permittee (see Section VIII below).
- ☐ The date permit responsibility was transferred is specified. (See Page 1)
- ☐ New Operator/Permittee: Before you submit this form to Ecology, please retain a copy for your records – this will serve as proof of permit coverage until documentation arrives from Ecology.
- ☐ For partial transfers: If the original permittee no longer owns or controls any portions of the site that meet the criteria for termination, the original permittee must submit a Notice of Termination (NOT) to terminate permit coverage. See the CSWGP website for a link to the NOT form: www.ecology.wa.gov/constructionstormwaterpermit.
- ☐ For sites with contaminated soils/groundwater or a new discharger to an impaired waterbody: Any special provisions to protect water quality put in place at the time of initial coverage have been reviewed and adopted by the new permittee.

Administrative Order Docket No. _____

VIII. Certification of New Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed/Typed Name

Company (operator/permittee only)

Title

Signature of New Operator/Permittee

Date

Signature of Operator/Permittee requirements:

- A. For a corporation: By a responsible corporate officer.
- B. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.
- C. For a municipality, state, federal, or other public facility: By either a principal executive officer or ranking elected official.

Please sign and return this **ORIGINAL** document to the following address:

Department of Ecology – Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

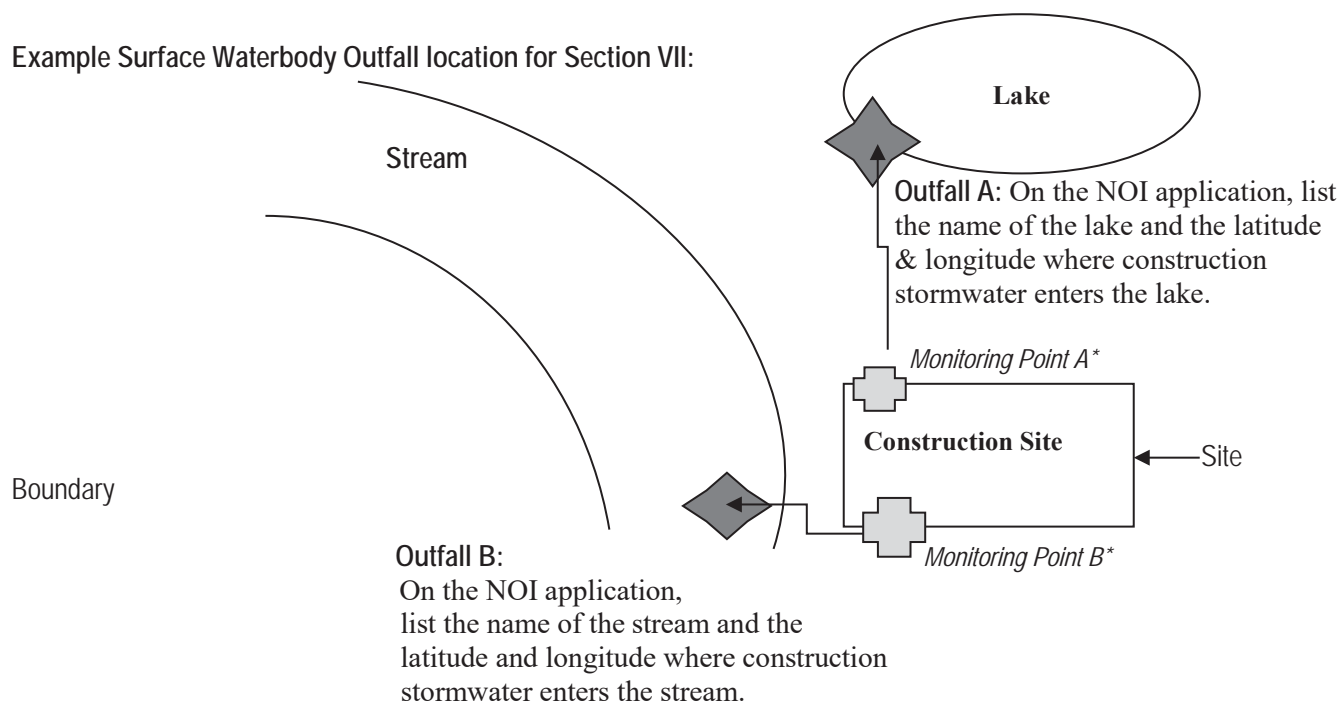
If you have questions about this form, contact the following Ecology staff:

Location	Contact Name	Phone	E-mail
City of Seattle, and Kitsap, Pierce, and Thurston counties	Josh Klimek	360-407-7451	josh.klimek@ecy.wa.gov
Island, King, and San Juan counties	RaChelle Stane	360-407-6556	rachelle.stane@ecy.wa.gov
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla, Whatcom, and Whitman counties.	Shawn Hopkins	360-407-6442	shawn.hopkins@ecy.wa.gov
Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, and Yakima counties.	Joyce Smith	360-407-6858	joyce.smith@ecy.wa.gov

You must submit monthly discharge monitoring reports using Ecology's WQWebDMR system. To sign up for WQWebDMR, or to register a new site, go to www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. To have the ability to use the system immediately, **you must submit the Electronic Signature Agreement with your application.**

If you have questions on this process, contact Ecology's WQWebDMR staff at WQWebPortal@ecy.wa.gov or 800-633-6193 or 360-407-7097 (local).

Example Surface Waterbody Outfall location for Section VII:



*Note: The monitoring points are for illustration only and are not required on this Notice of Intent application form. Monitoring point information will be entered on the monthly discharge monitoring report as required for active permits.

To request ADA accommodation including materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TYY at 877-833-6341.

APPENDIX D

CITY OF TACOMA TRAFFIC CONTROL HANDBOOK

TRAFFIC CONTROL HANDBOOK

**MUST MAINTAIN
PEDESTRIAN AND
DISABILITY ACCESS AT
ALL TIMES**



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Right Lane Closure
Right Lane Closure at Intersection
Left Lane Closure At Intersection
One Way Street Multi-Lane Closure
Four Lane Road – Two Lane Closure
Five Lane Road Multi-Lane Closure
Traffic Control for Lane Shifting - 5 Lane
Roundabout Traffic Control with Flaggers

SHORT DURATION WORK – UNDER 60 MINS

Lane Closure at Intersection
Mid-Block Lane Closure
Center Lane Closure at Intersection
Inside Lane Closure at Intersection

PEDESTRIANS & MISCELLANEOUS

Traffic Control Recommendations for Truck Crossings
Traffic Control for Portable Dumpsters
Traffic Control for Moving Van
Bypass Walkway for Pedestrians
Bypass Ramps for Pedestrians
Curb Ramp Pedestrian Control
Sidewalk Closures
Sidewalk Closure with Parking Closure

SURVEY CREWS

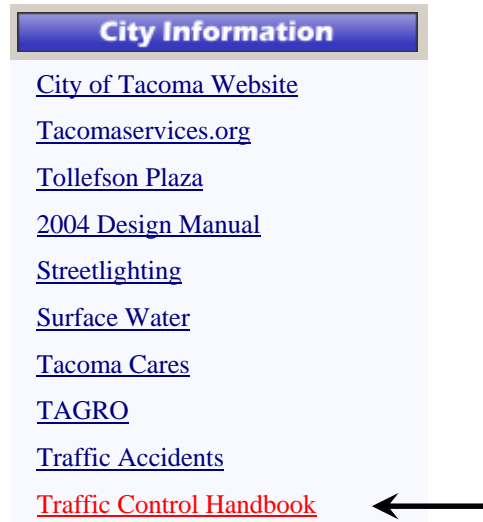
Survey Two Lane Arterial Intersection
Survey Two Lane Arterial Mid Block
Survey Multi-Lane Arterial

CREATE YOUR OWN PLAN

Blank Two Lane Road
Blank Two Lane Road with Center Turn Lane
Blank Two Lane Road with Two Intersections
Blank Two Lane Road with Two Intersections and Parking
Blank Two Lane Road with Four Intersections and Parking
Blank Four Lane Road with Two Intersections
Blank Four Lane Road with Two Intersections and Parking
Blank Five Lane Road

TRAFFIC CONTROL PLAN INSTRUCTIONS

- 1) To create a traffic control plan, go to www.govME.com
- 2) At the bottom of the page, under “City Information” choose “[Traffic Control Handbook](#)”



The City of Tacoma Traffic Control Handbook will open up in a new screen.

- 3) Read “**INTRODUCTION & SPECIAL REQUIREMENTS**” Chapter. Pay particular attention to the sections regarding [Pedestrian and Disability access](#).
- 4) Choose a plan closest to the type of traffic control you need.
 - You may need to alter an existing plan or use multiple plans
- 5) Print out the traffic control plan that you need.
- 6) On the map, identify street names and addresses of work.
- 7) Draw site specific details (work area, location of signs, cones, etc.).
- 8) Add Contractor name and contact information.
- 9) Specify type of work at the top of the page
- 10) List dates of work and desired work hours.
- 11) Contact a Permit Specialist when you are done filling in your Traffic Control Plan.
- 12) Write the permit number in the top right corner of the sheet (when obtained from the Permit Specialist).
- 13) The Traffic Control Plan is not valid until permit is acquired and paid for.
- 14) You must keep a copy of the Traffic Control Plan on your job site for Inspectors and Road Use Compliance Officers to review. Prime contractors will be responsible for any subcontractor's traffic control unless sub goes through the above process.



City of Tacoma Public Works Department

INTRODUCTION

This manual is intended for use by any person, firm or corporation, public or private, when involved in construction, maintenance or any activity that alters the normal flow of traffic, vehicular or pedestrian, on any City right-of-way.

This manual shall be used in conjunction with Part VI of The Manual on Uniform Traffic Control Devices (MUTCD) for the installation of temporary traffic control and the Access Board's Guidelines for Accessible Public Rights -of-Way (2002), (www.access-board.gov/),

Authority to establish local rules regarding channelization and traffic control is permitted by Washington Administrative Code (WAC) 308.330.265.

Unless specifically addressed in this manual, when the term "should" is used in the MUTCD to describe a condition or method for traffic control, it means that if that suggestion is not used an equally effective method will be used. It does not eliminate the responsibility to address the situation.

This manual does not prohibit the use of additional traffic control or warning devices as long as the minimum conditions are met.

For additional information, please call the Engineering Division at (253) 591-5500.

PERMITS

A permit must first be obtained from the Public Works Department by any person, firm or corporation working in City right-of-way that alters the normal flow of traffic or makes any public place dangerous.

Provisions for obtaining a permit are outlined in Tacoma Municipal Code Chapter 10.22.

All applications for permits must have a comprehensive traffic control plan attached for review by the Traffic Engineer. Permits will not be issued unless the Traffic Engineer has approved the traffic control plan.

MUNICIPAL AGENCIES

Municipal agencies and Utilities are not required to obtain a permit for routine maintenance and repairs, but must notify the Traffic Engineer a minimum of 72 hours in advance if the following conditions apply:

1. Closing any street (see attached street closure requirements).
2. Altering or detouring traffic during commute hours on arterial streets (7 a.m. – 9 a.m. and 4 p.m. – 6 p.m.).
3. The activity or obstruction will be in place for more than 8 hours.
4. The activity or obstruction is during the hours of darkness.
5. The activity reduces traffic on arterial streets to less than one lane in each direction.

GENERAL RULES

The following list of rules must be followed while involved in construction, maintenance or other activity in City right of way unless specifically addressed by the Traffic Engineer.

1. All traffic control devices must meet the requirements established by the Manual on Uniform Traffic Control Devices.
2. No activity will be placed in such a way as to detour, slow or alter traffic flow during peak commute hours. These times are generally from 7 a.m.– 9 a.m. and 3:30 p.m. – 6 p.m. The Traffic Engineer may allow an exception with prior approval.
3. An approved traffic control plan must be on-site and accessible for inspection at all times by law enforcement or inspectors.
4. Traffic control plans and activities must include the following components:
 - a. Advanced Warning Area: Signs and other devices inform drivers of what to expect.
 - b. Transition Area: Channelization devices move traffic from the normal flow to the desired path.
 - c. Activity Area: Area where the work takes place.
 - d. Buffer Space: Area used to separate traffic from the work activity area and provides recovery space for an errant vehicle.
 - e. Termination Area: Area used to return traffic to the normal path.
5. **Pedestrian and disability access** must be maintained throughout the period of time construction is underway. This does not just apply to the final product, but accessibility must be maintained during the actual construction. Safe, clearly marked routes must be maintained through or around the construction activity at all times. The use of temporary walkways with width, slope, and cross-slope compliant to the maximum extent feasible shall be incorporated on the job site. Surfaces must be firm, stable, and slip resistant. Channeling and barricading must be used to separate pedestrians from traffic. Adequate barricading must be addressed to prevent visually impaired pedestrians from entering work zones. Alternate pedestrian circulation routes with appropriate signage that can be accessed by people who use mobility aids (wheelchairs, walkers, scooters, etc.) The alternate circulation path shall have a minimum width of 5 feet and parallel the disrupted pedestrian access route when practicable. Barricades and channelizing devices shall be continuous, stable, non-flexible, and shall consist of a wall, fence, or enclosure specified in section 6F of the MUTCD. A solid toe rail should be attached such that the bottom edge is 6 inches maximum above the walkway surface. The top rail shall be parallel to the toe rail and shall be located 36 inches minimum and 42 inches maximum above the walkway surface. If drums, cones, or tubular markers are used to channelize pedestrians, they shall be located such that there are no gaps between the bases of the devices in order to create a continuous bottom, and the height of each individual device shall be no less than 36 inches.
6. Persons in charge of maintaining or establishing traffic control and channelization must have a certified flagger control card in their possession and must be on the site at all times or be represented by another knowledgeable, certified person.
7. A flagger cannot be used to direct traffic through a signalized intersection against the signal indications. When flaggers are used near signalized intersections, care will be used to clear the intersection of traffic before the signal change.
8. In some situations, Signal modifications may be used to support the traffic control plan. The traffic Signal Shop shall make all modifications, and all modifications must be approved by the Traffic Engineer.
9. A uniformed police officer is required to direct traffic through a signalized intersection against the signal indications.
10. Police officers may also be required during activities for traffic calming if speeds are high, pedestrian or vehicular traffic volume is extremely high, or during emergencies.

11. To minimize the disruption to access to adjacent properties, and to Pierce Transit operations, the lane closure area shall be limited to that area of active work and necessary for appropriate lane closure tapers. The Contractor shall stage work to maintain access to and egress from all properties at all times. An **approved traffic control plan and permit shall** be posted on the job site for review by City officials. Construction Inspectors shall ensure the approved traffic control plan is on site at all times. Any approved Traffic control plans the Contractor doesn't follow are in violation of the Standard Specifications which are included in the contract. It is the inspector's job to have them comply or Stop work. Jobs having permits only and not following the approved Traffic Control plan is a violation of Tacoma Municipal Code 10.22.080. The work can be stopped or a violation infraction can be imposed in an amount not exceeding \$500.00.
12. When parking lanes are closed due to construction, "no parking" portables will be installed at least 48 hours in advance of the closure in unrestricted areas and 24 hours in advance in time restricted areas. The message on the portables shall establish the date and hours for no parking.
13. During emergencies where life, property or public safety is in danger, conditions listed may be changed. Traffic control will be addressed along with the initial response. (See attached page for emergency contact numbers.)
14. The Traffic Engineer may allow reduced speed limits in construction area zones. Request for speed reduction must be included in the traffic control plan.
15. All signs and cones shall be removed from the right-of-way when traffic control is not in effect.
16. The contractor may be required to discontinue work if possible conflict exists with special events such as parades, sporting events, miscellaneous rallies, and large public meetings. Information concerning such events can usually be obtained from the City Clerks Office, tel. (253) 591-5171.
17. Maintenance of 2-way traffic on arterial streets at all times except on one-way streets. Additional width for facilitating traffic flow may be obtained by prohibiting on-street parking adjacent to the work zone.
18. No work shall be scheduled on streets or sidewalks within the City of Tacoma Business Districts from Thanksgiving Day through New Year's Day.
19. All traffic control devices used at night, particularly signs, barricades and channelizing devices, must have Type C steady burn lights. Requests to reduce the number of lights used on channelizing devices must be specifically detailed on the approved traffic control plan.

Failure to comply with the provisions of this manual is a traffic infraction and, notwithstanding any fines or penalties levied against the person, firm or corporation involved, if a safety hazard exists, the work may be ordered stopped and the obstruction cleared by the person, firm or corporation responsible or by the City at that responsible party's expense.

<http://www.cityoftacoma.org/>

<http://wspwit01.ci.tacoma.wa.us/govME/Admin/Inter/StartPage/default.aspx>

http://wspwit01.ci.tacoma.wa.us/download/PDF/Traffic_Control_Handbook.pdf

Special Traffic Requirements

The contractor shall notify the following departments three (3) working days prior to any street closure.

Pierce Transit requires five (5) working days prior to any route detours.

Department	Phone	Fax	Email
Traffic Engineering	591-5500	591-5533	
Tacoma Fire Department	591-5733	591-5034	kmueller@cityoftacoma.org
Tacoma Police –Ops	591-5932	594-7842	
LESA	798-4721 Opt #3	798-2708	
Sound Transit Link	206-370-5674		
Pierce Transit	581-8109	589-6364 or 589-6367	
Pierce Transit Events Coordinator	581-8001	984-8161	
Public Works/Street Ops	591-5495	591-5302	
School Trans Office	571-1853	571-1932	
Durham School Services		475-0422	
First Students		272-7799	
UWT Facilities Services		692-5705	
Off-Duty Police Officer	591-5932		TacomaPoliceEvents@cityoftacoma.org
Tacoma Refuse	591-5544	591-5547	

Include the following information when notifying the above departments.

Name of street to be closed & the extent of the closure (between which two roads).

Stipulate whether or not the area is to be open to local traffic & emergency vehicles.

State the date(s) & hour(s) the closure will be in effect.

Give the reason for the closure.

Provide detour information.

State who/which firm is performing the work.

Provide the name and telephone number of a contact person.

Recommended Publications

As a contractor you will have many opportunities for setting up traffic control. To comply with national standards, we recommend having the **MUTCD** (Manual on Uniform Traffic Control Devices) for future reference.

To order hard copies or CD versions of the MUTCD please go to one of the links below:

American Association of State Highway Organizations at: <https://bookstore.transportation.org/>

Institute of Traffic Engineers at: <http://www.ite.org/bookstore/index.asp>

American Traffic Safety Services Association at: <http://www.atssa.com/>

Things to Think About

Before the traffic control plan is drawn visit the site and look for special circumstances that may be unique to the area. For example work being done on the sidewalk may be a hazard if someone walks out a door into your wet cement or a tool may fall on someone's head if someone is in a lift washing windows. Call Pierce Transit if you need to do work at a bus stop. Transit requires five (5) days notice for route detours. Transit will inform citizens and move or temporarily close the stop. Keep in mind that pedestrians need 5' of unobstructed walking area. If roadwork needs to be done on an arterial street, traffic control devices shall be removed during peak hour traffic (7am to 9am and 4pm to 6pm). For further information see our TRAFFIC CONTROL HANDBOOK.

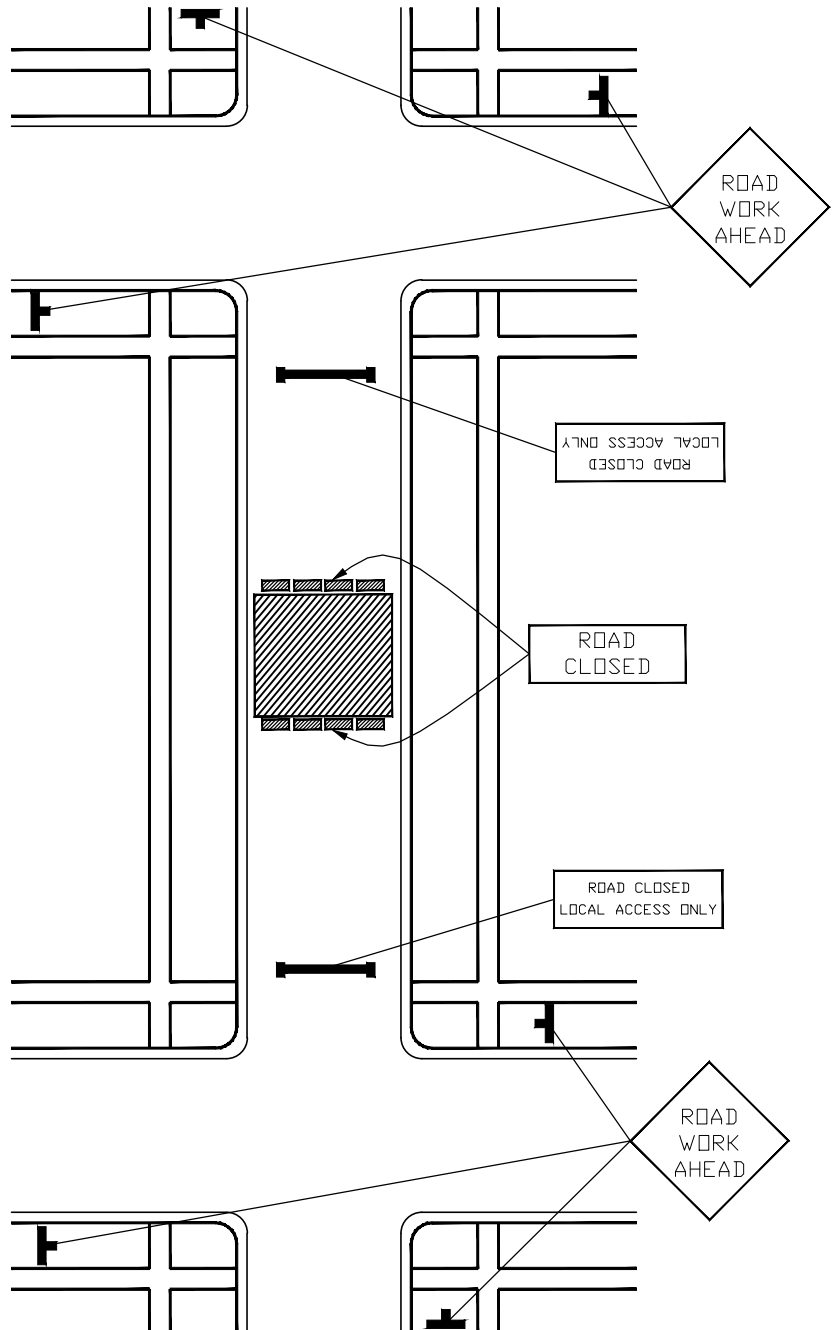
<http://www.cityoftacoma.org/>

<http://wspwit01.ci.tacoma.wa.us/govME/Admin/Inter/StartPage/default.aspx>

http://wspwit01.ci.tacoma.wa.us/download/PDF/Traffic_Control_Handbook.pdf

SAMPLE SETUP

Note: At night, signage and barricades must be Type C steady burn lights. A contractor may close a nonarterial street to through traffic, provided that local access is maintained at all times with a minimum of a 20' wide access lane. Road Work Ahead signs may be eliminated on non-arterial streets.



NON-ARTERIAL ROAD CLOSURES

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

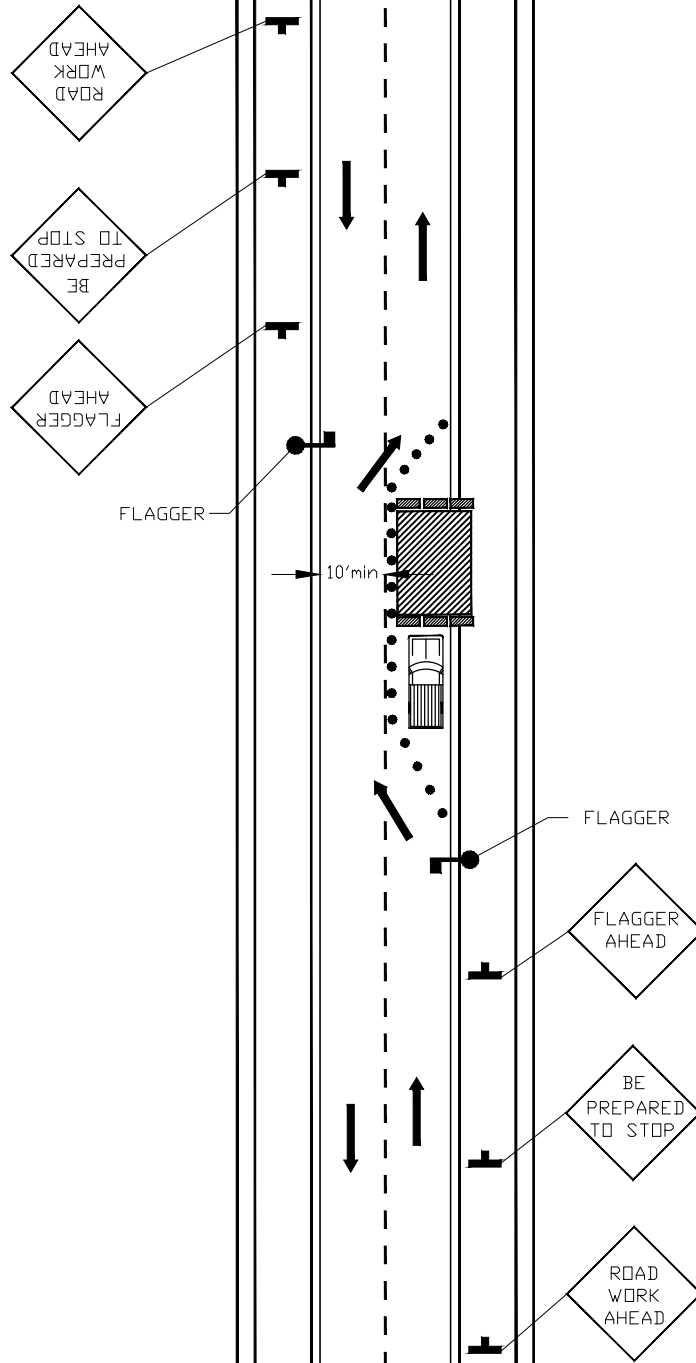
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



SINGLE LANE NON-ARTERIAL WITH FLAGGER

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

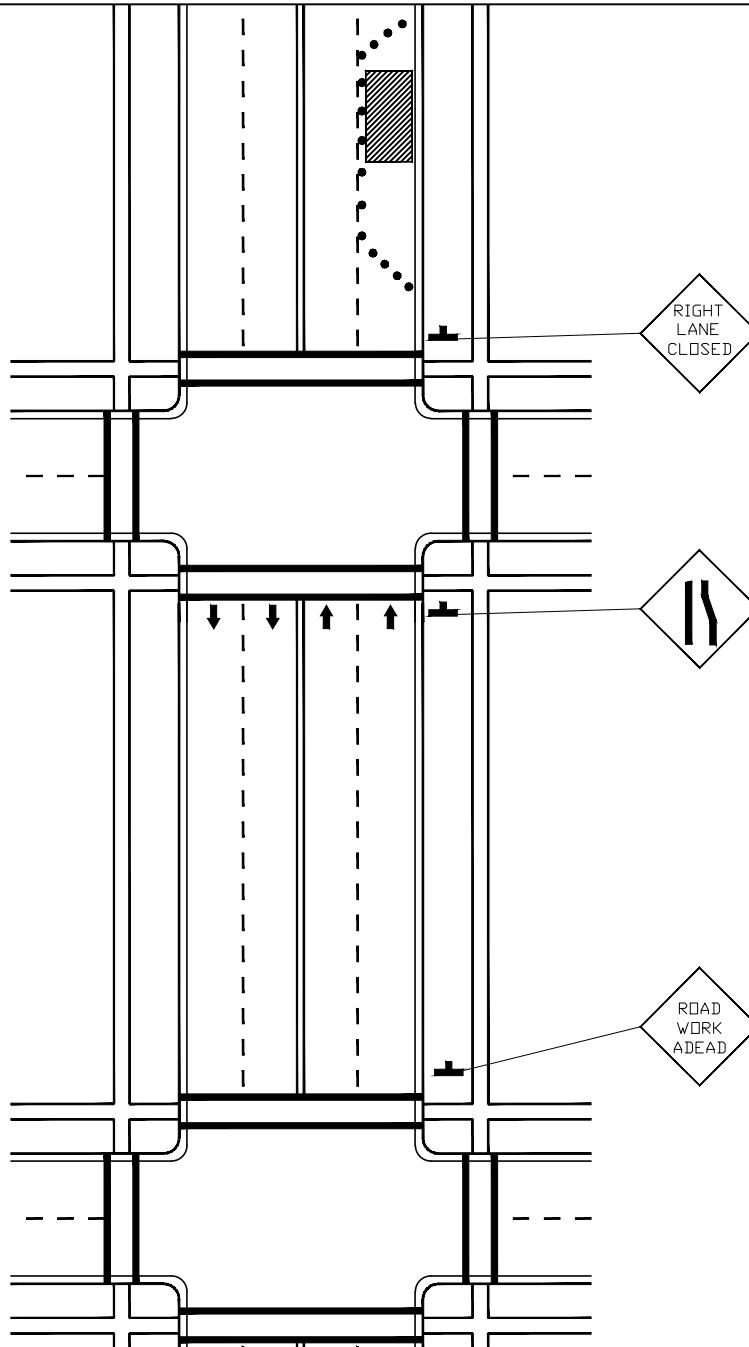
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



CBD
RIGHT LANE
CLOSURE

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

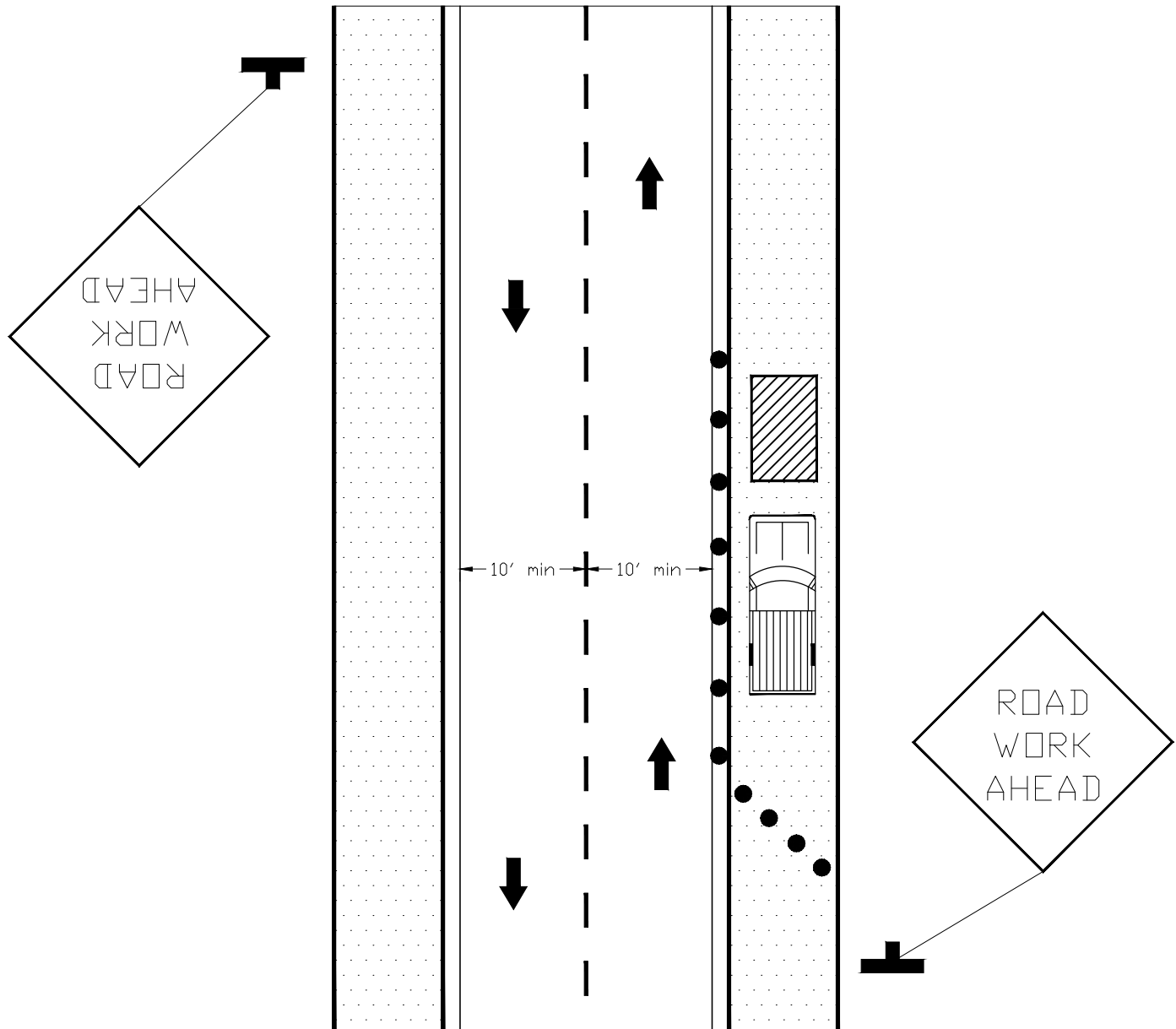
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



SHOULDER WORK WITH MINOR ENCROACHMENT

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

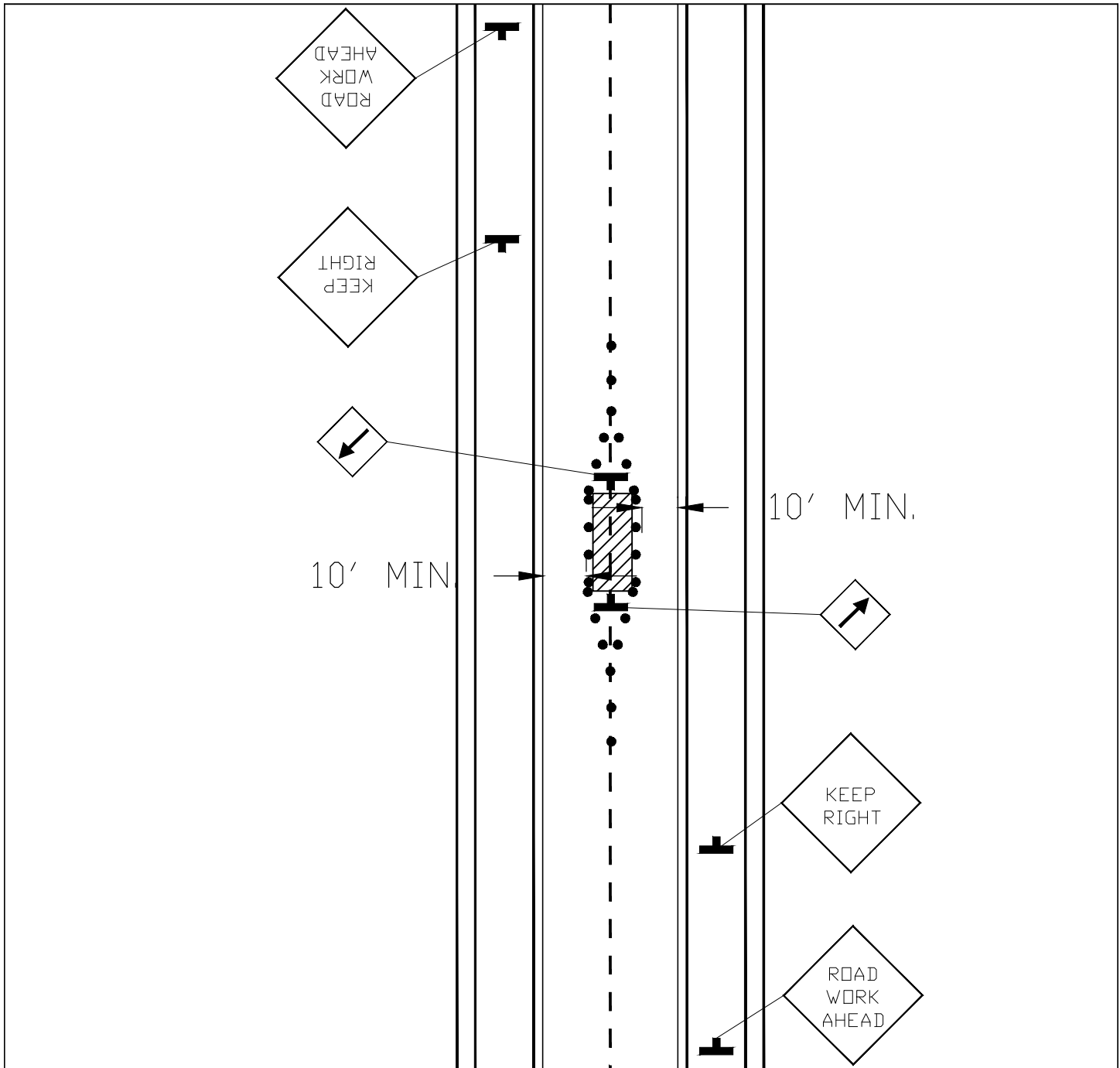
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

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NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



TWO LANE CENTER CLOSURE

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

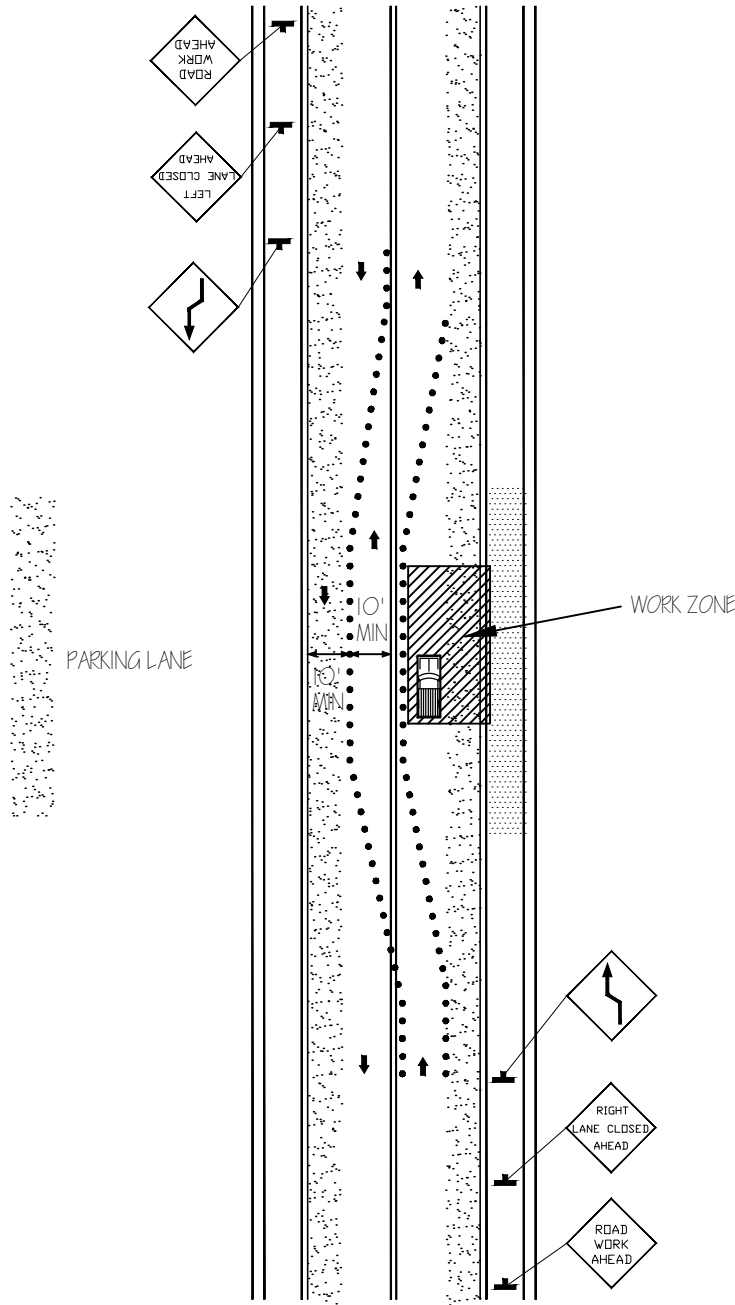
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC, AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



TWO WAY LANE SHIFT WITH PARKING

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

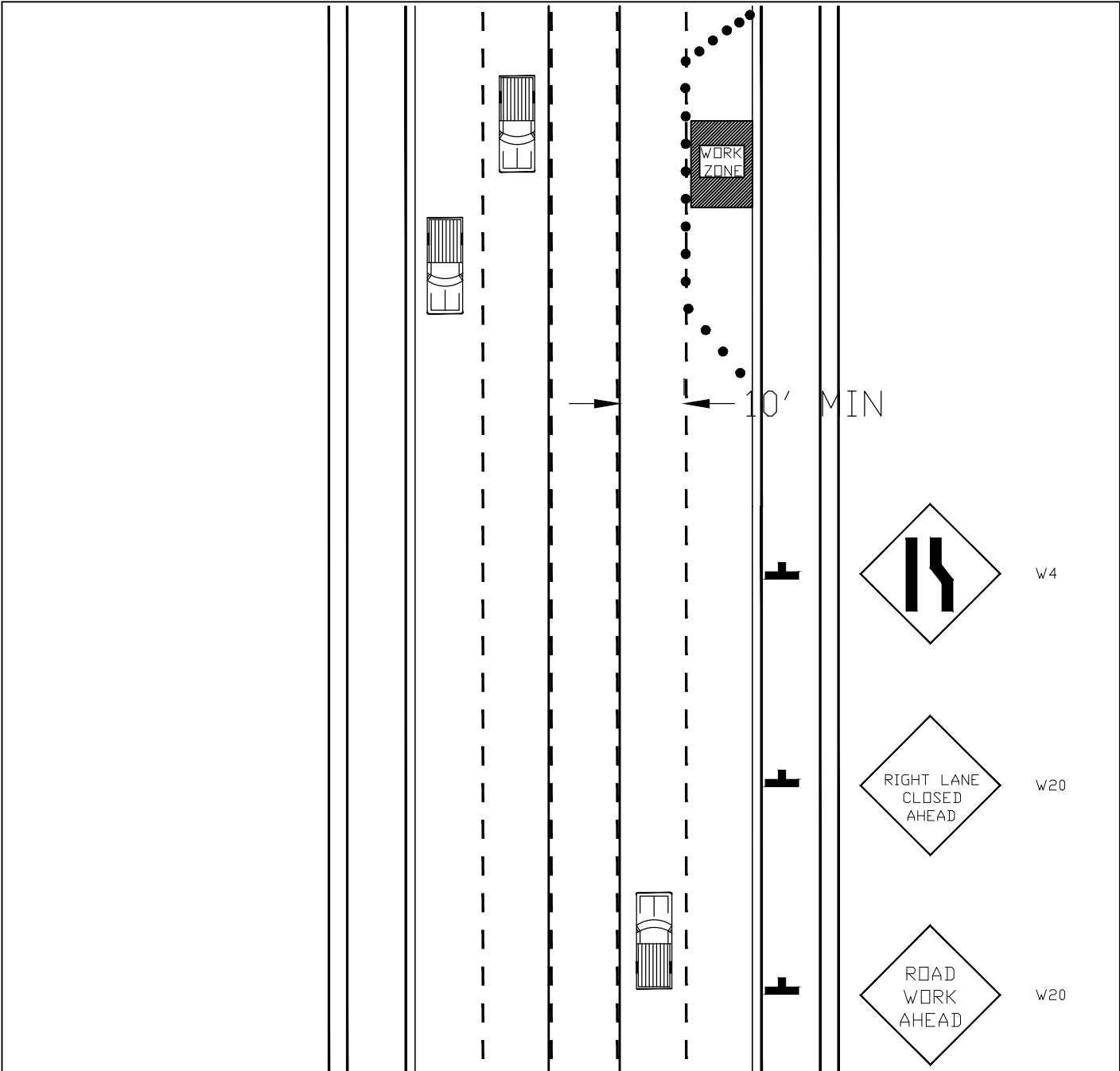
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

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NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



RIGHT LANE
CLOSURE

MERGING TAPER LENGTHS
FOR CONE PATTERN
(All minimums)

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS
MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS
EVENING AND WEEKENDS ONLY
START TRAFFIC CONTROL SET UP DATE & TIME: _____
MUST BE OUT OF THE ROAD BY DATE & TIME: _____

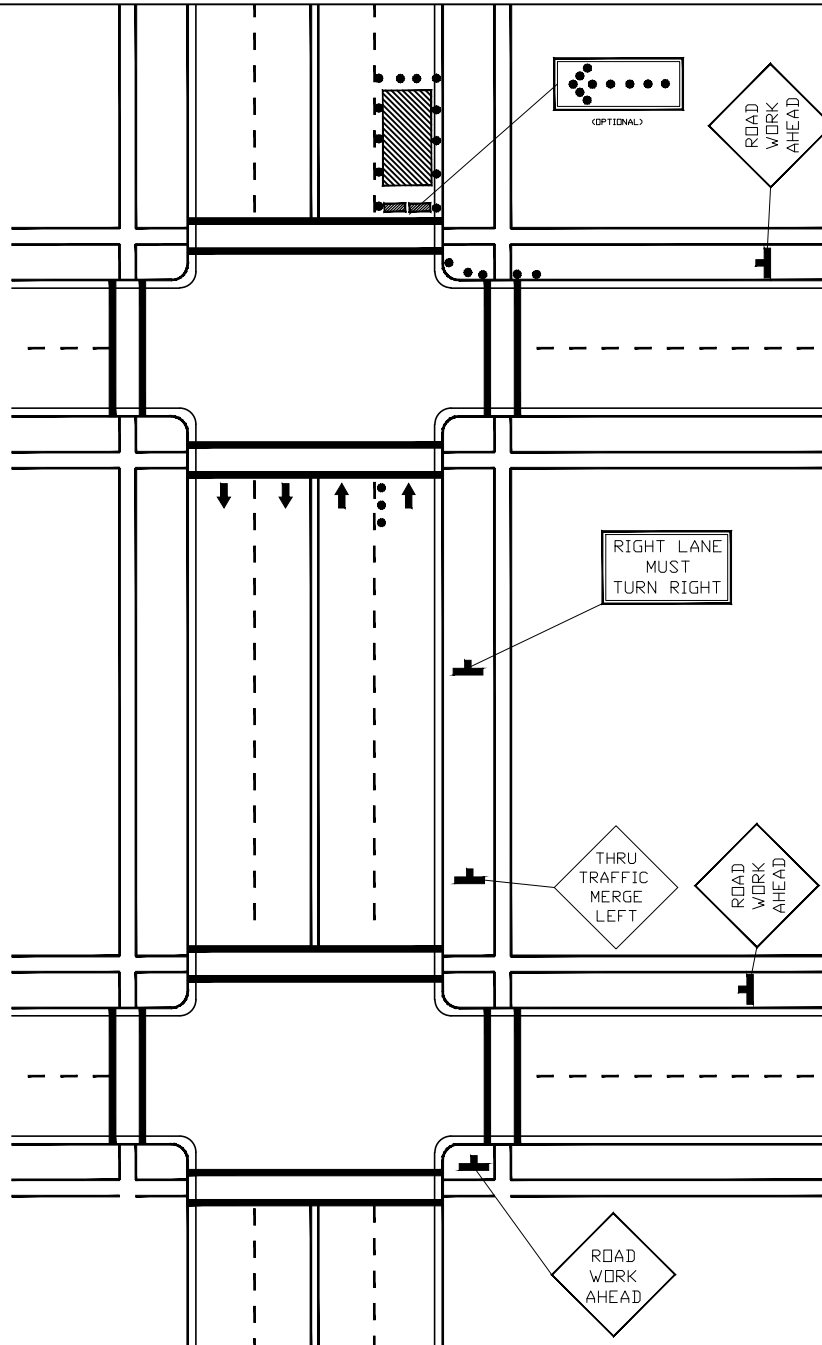
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

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SAMPLE SETUP



RIGHT LANE CLOSURE AT INTERSECTION

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

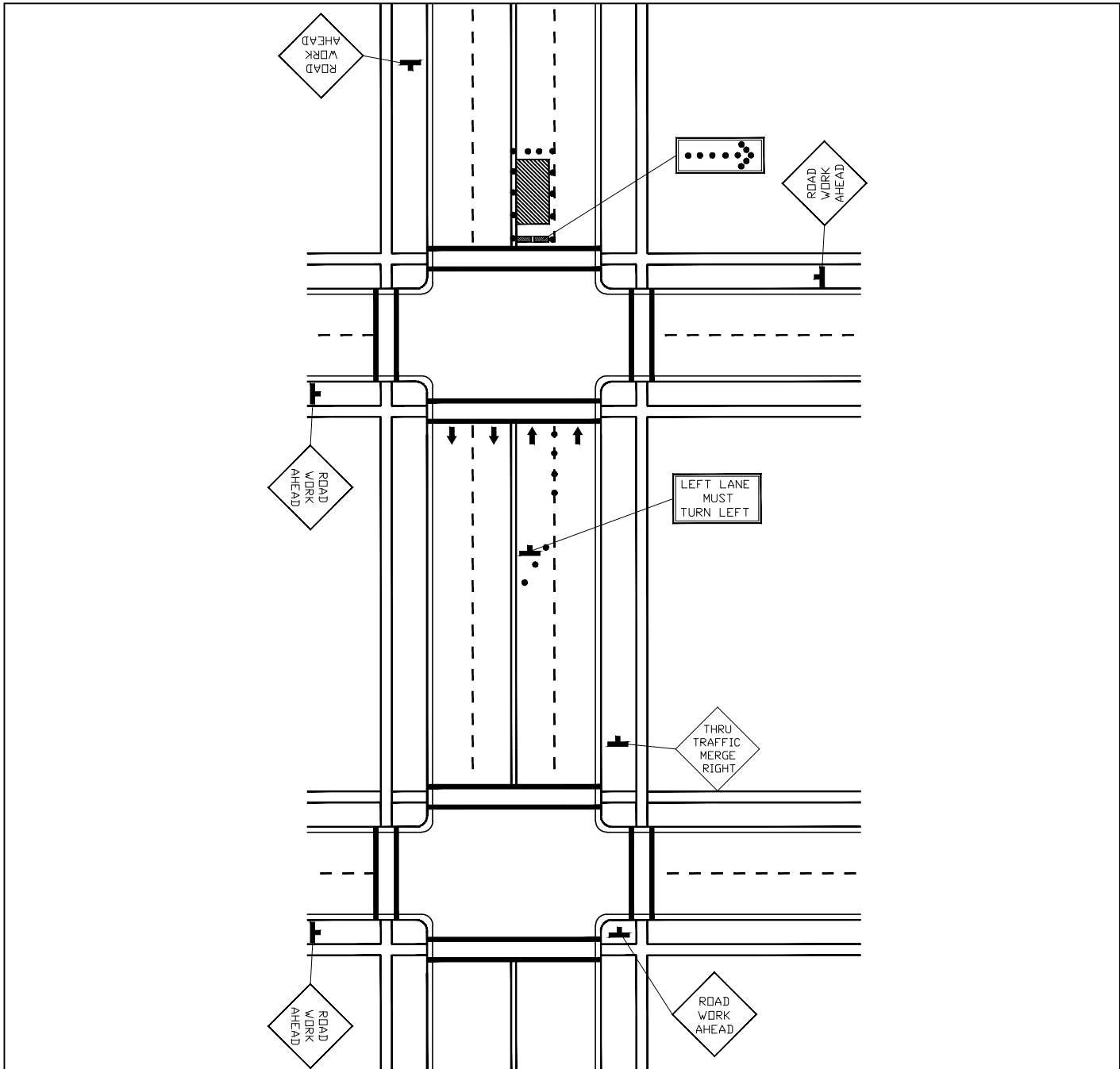
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



LEFT LANE CLOSURE AT INTERSECTION

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

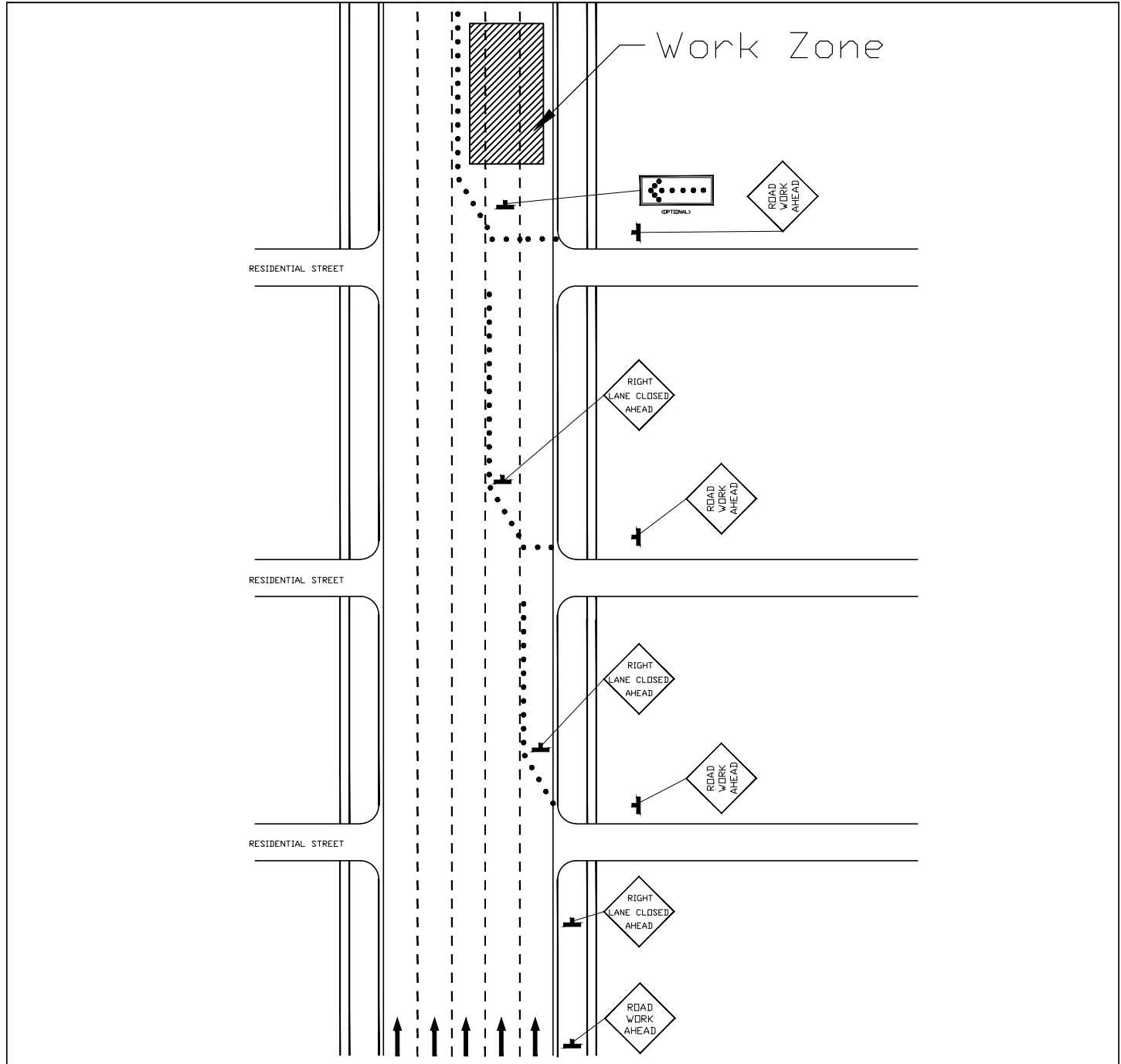
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



ONE WAY MULTI-LANE CLOSURE

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

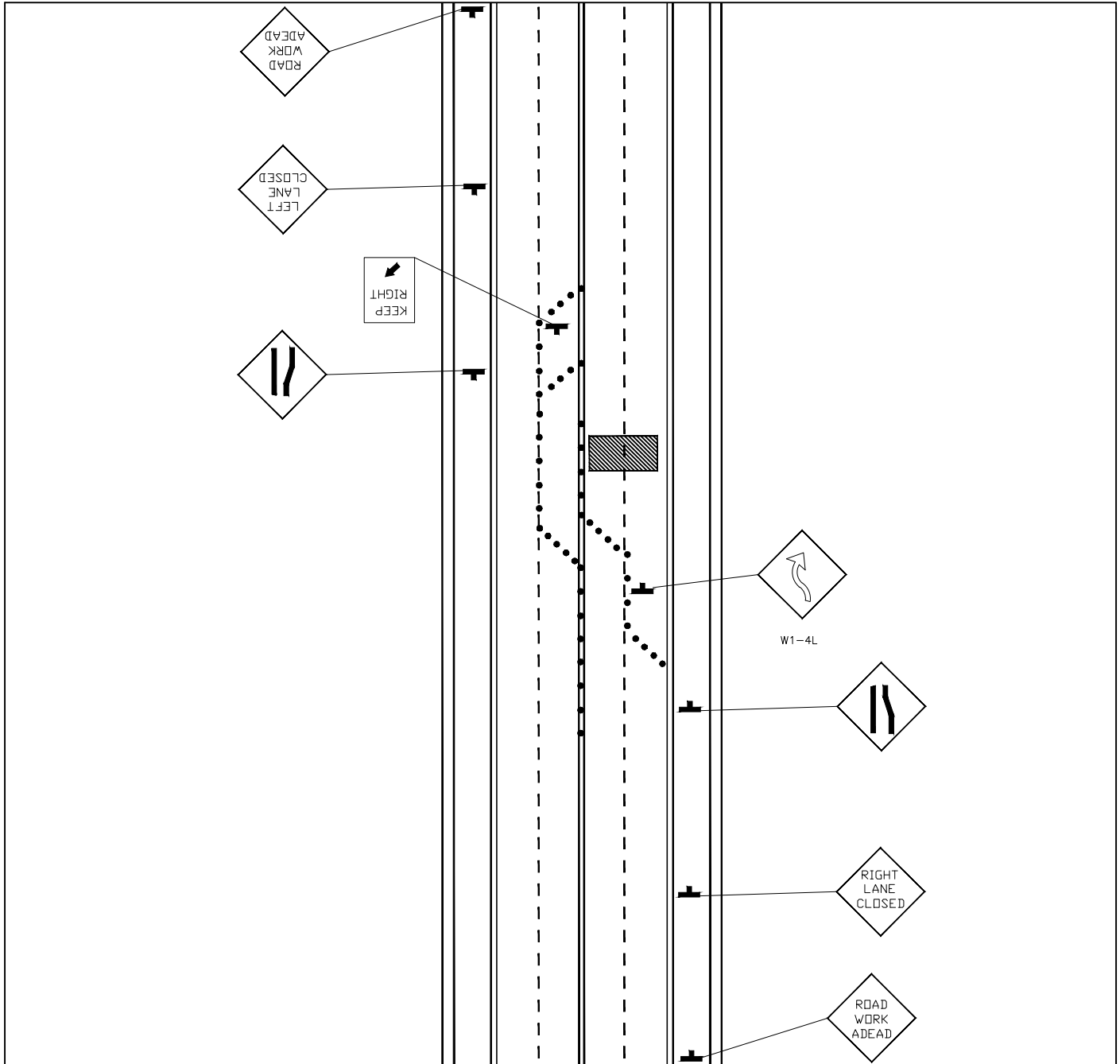
MPH	10	15	20	25	30	35	40	
LANE WIDTH	8'	14	30	54	84	120	164	214
	10'	17	38	67	105	150	204	267
	12'	20	45	80	125	180	245	320
	14'	24	53	94	146	210	286	374
	16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)								
Offset cones 1 foot maximum.								

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



FOUR LANE ROAD
TWO LANE CLOSURE
ARTERIAL STREET

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

NUMBER OF CHANNELIZATION DEVICES (CONES)

Offset cones 1 foot maximum.

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

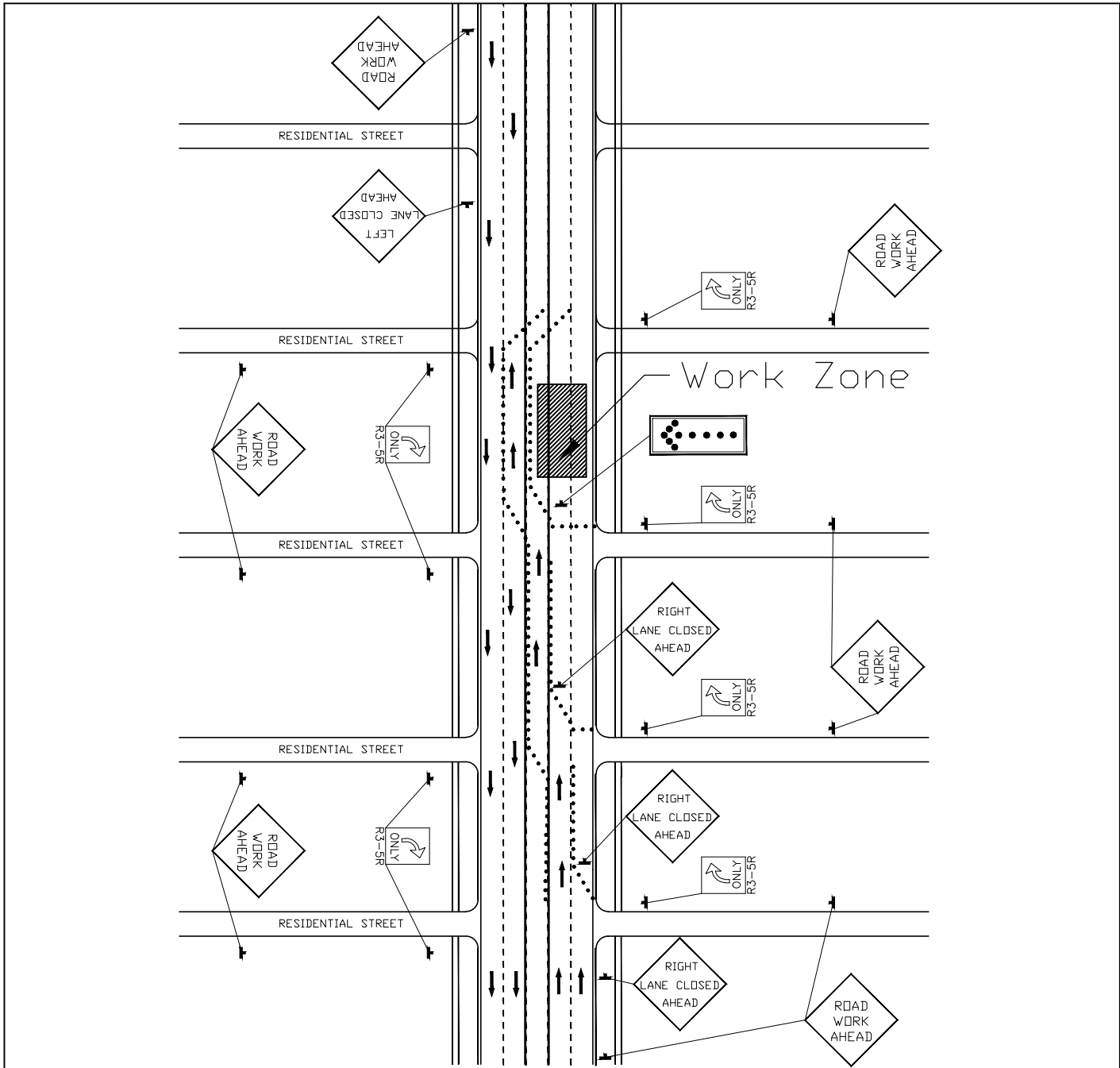
MUST BE OUT OF THE ROAD BY DATE & TIME: _____

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



FIVE LANE ROAD MULTI-LANE CLOSURE

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

LANE WIDTH

NUMBER OF CHANNELIZATION DEVICES (CONES)

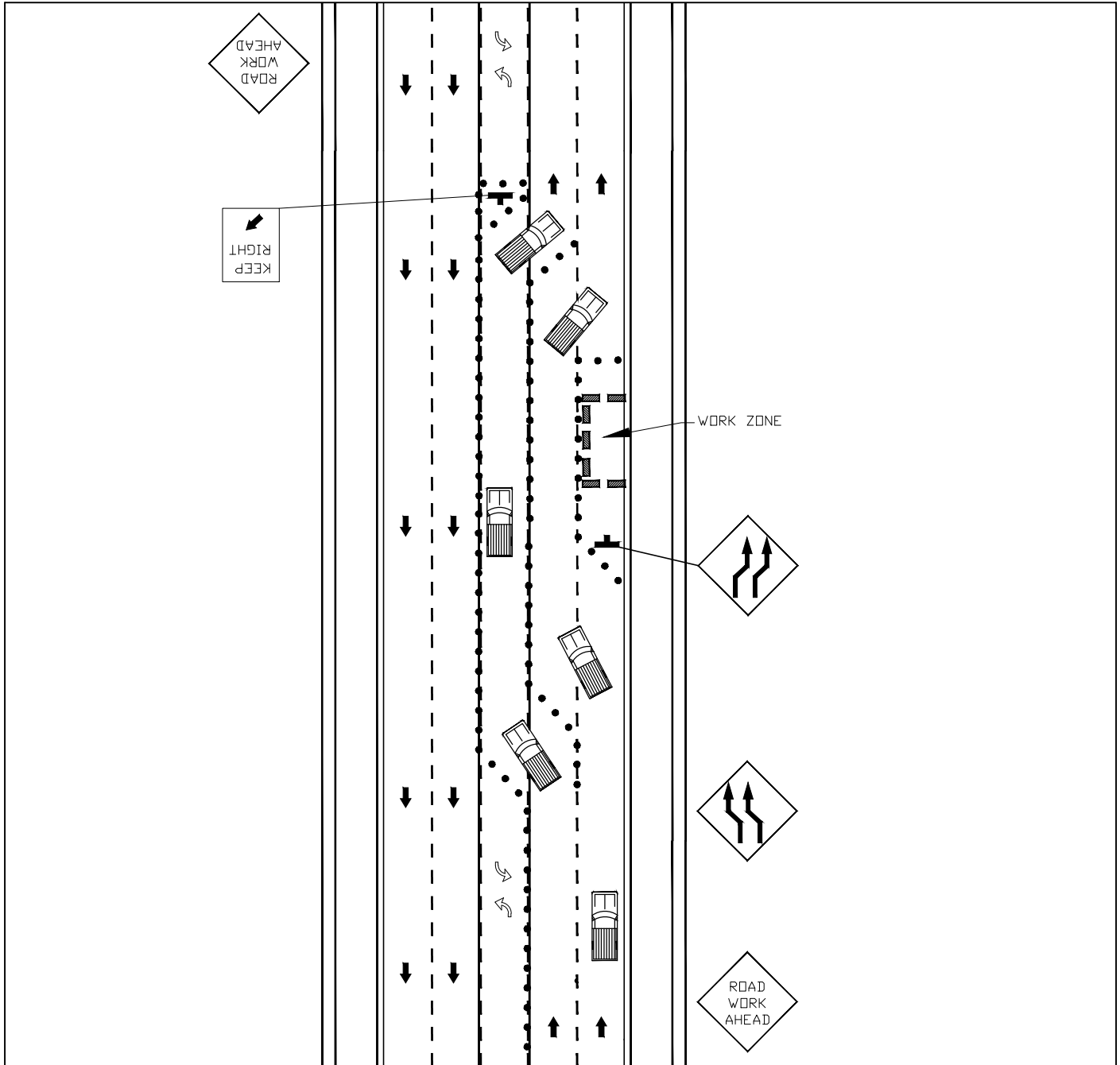
Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



TRAFFIC CONTROL FOR 5 LANE SHIFTING

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

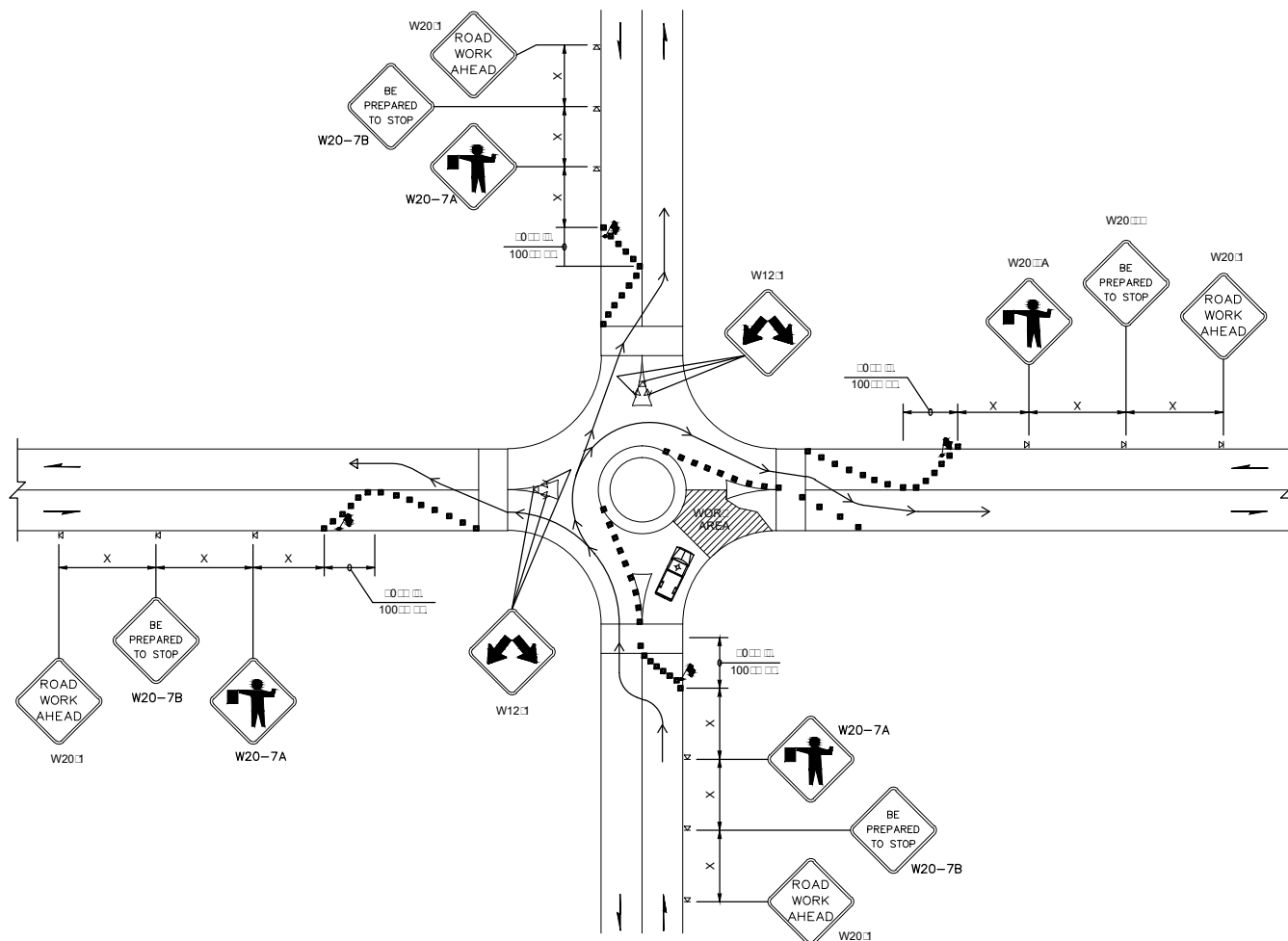
NUMBER OF CHANNELIZATION DEVICES (CONES)

Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.



LEGEND

1. Night work requires additional roadway lighting at flagging stations, refer to WSDOT Standard Specifications for additional details
2. Protective vehicle recommended – may be a work vehicle.
3. Each roundabout location is unique and the traffic control must be developed to meet the specific conditions of the location and the work operation.
4. If the work and all work vehicles are off of the travel lanes and island apron, a single Road Work Ahead sign per approach is all that is required. Refer to additional guidance in the MUTCD manual for further information.
5. Consider an additional flagger in center island to assist traffic movement through roundabout or additional signing as appropriate.

LEGEND

- FLAGGING STATION
- SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE – RECOMMENDED
- VEHICLE TRAVEL PATH DURING A FLAGGING PHASE

TYPICAL ROUNDABOUT TRAFFIC CONTROL WITH FLAGGERS

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

NUMBER OF CHANNELIZATION DEVICES (CONES)

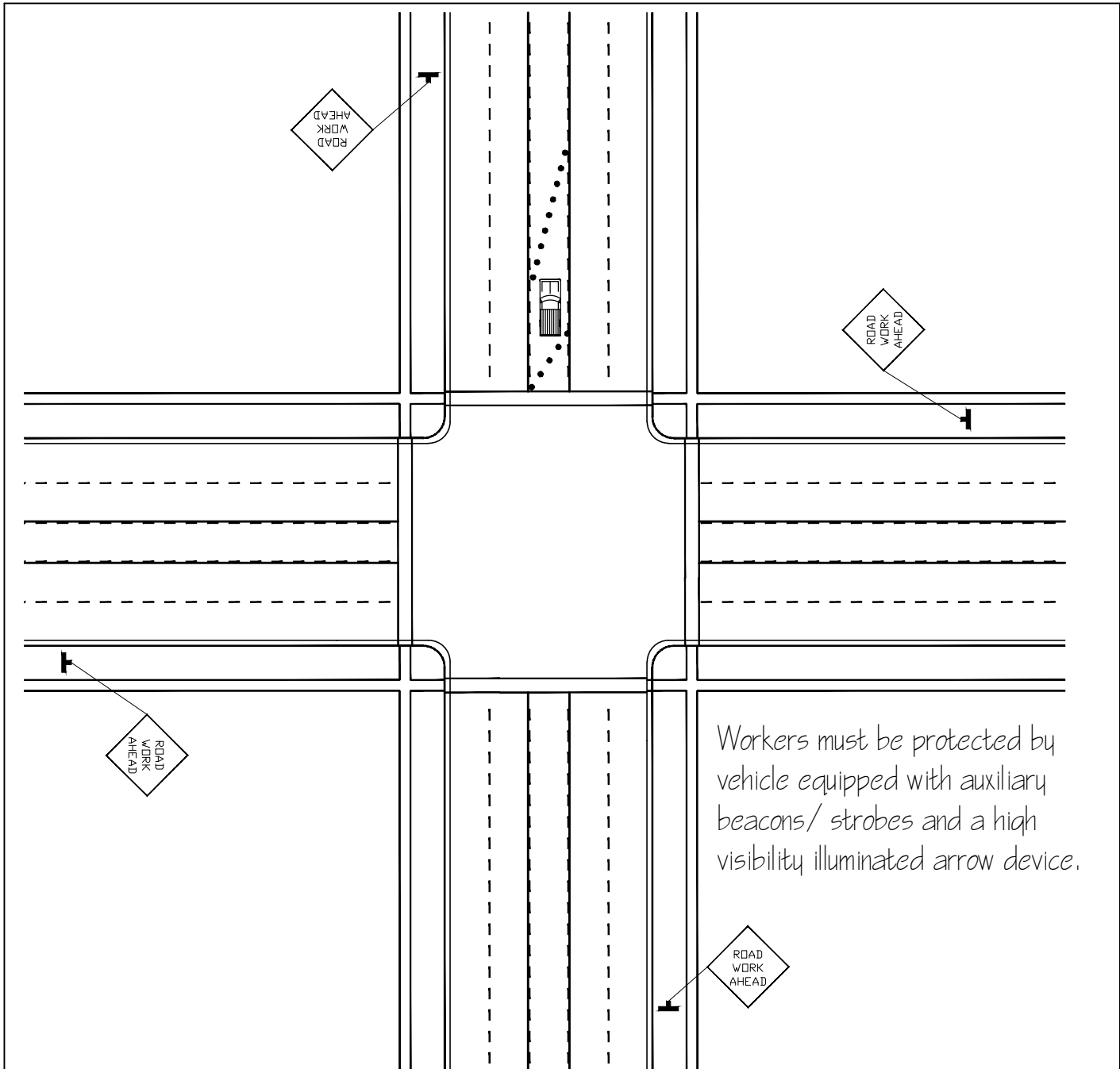
Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



CENTER LANE CLOSURE AT INTERSECTION UNDER 60 MINUTES

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

LANE WIDTH

NUMBER OF CHANNELIZATION DEVICES (CONES)

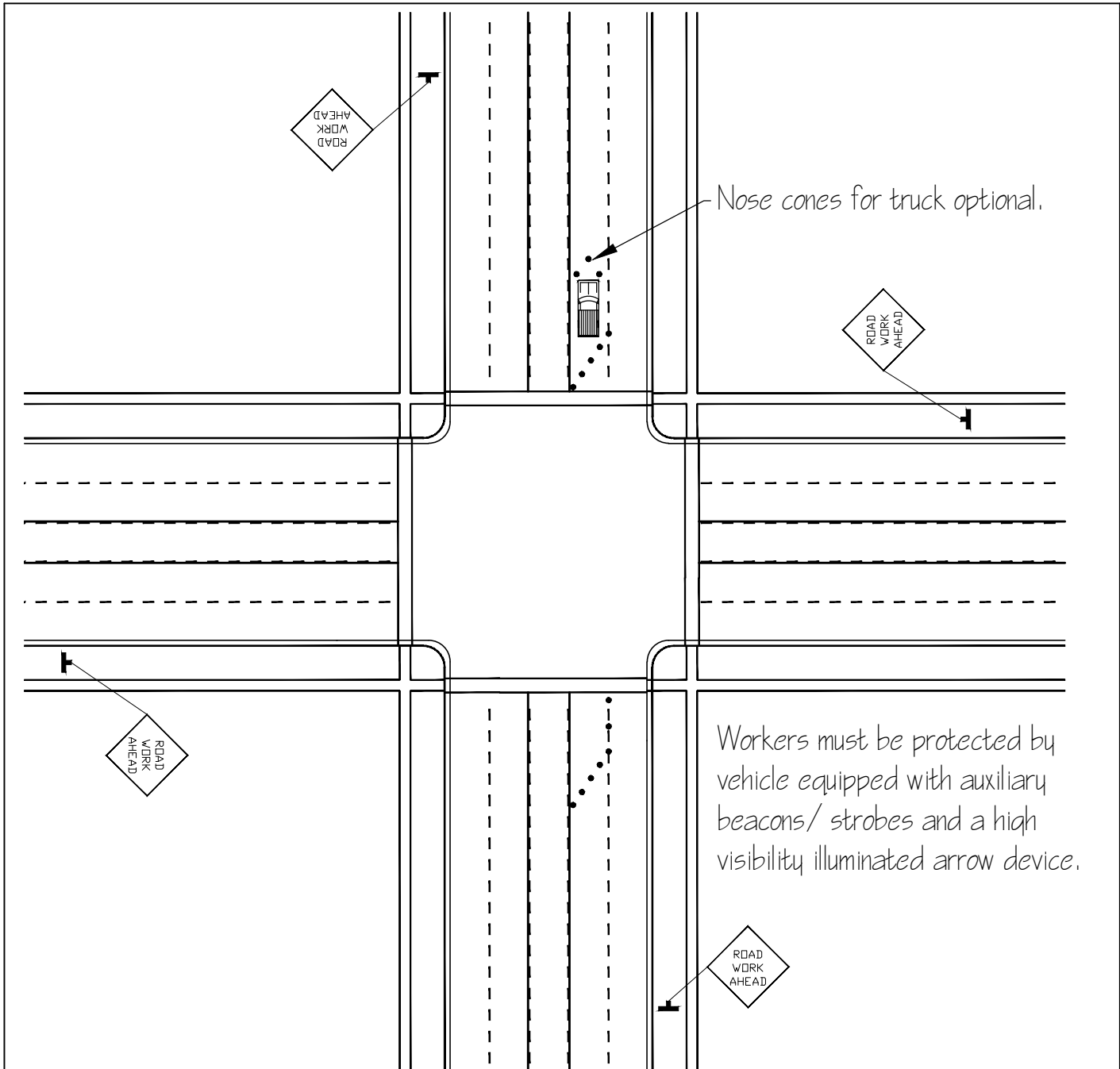
Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



INSIDE LANE CLOSURE AT INTERSECTION UNDER 60 MINUTES

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

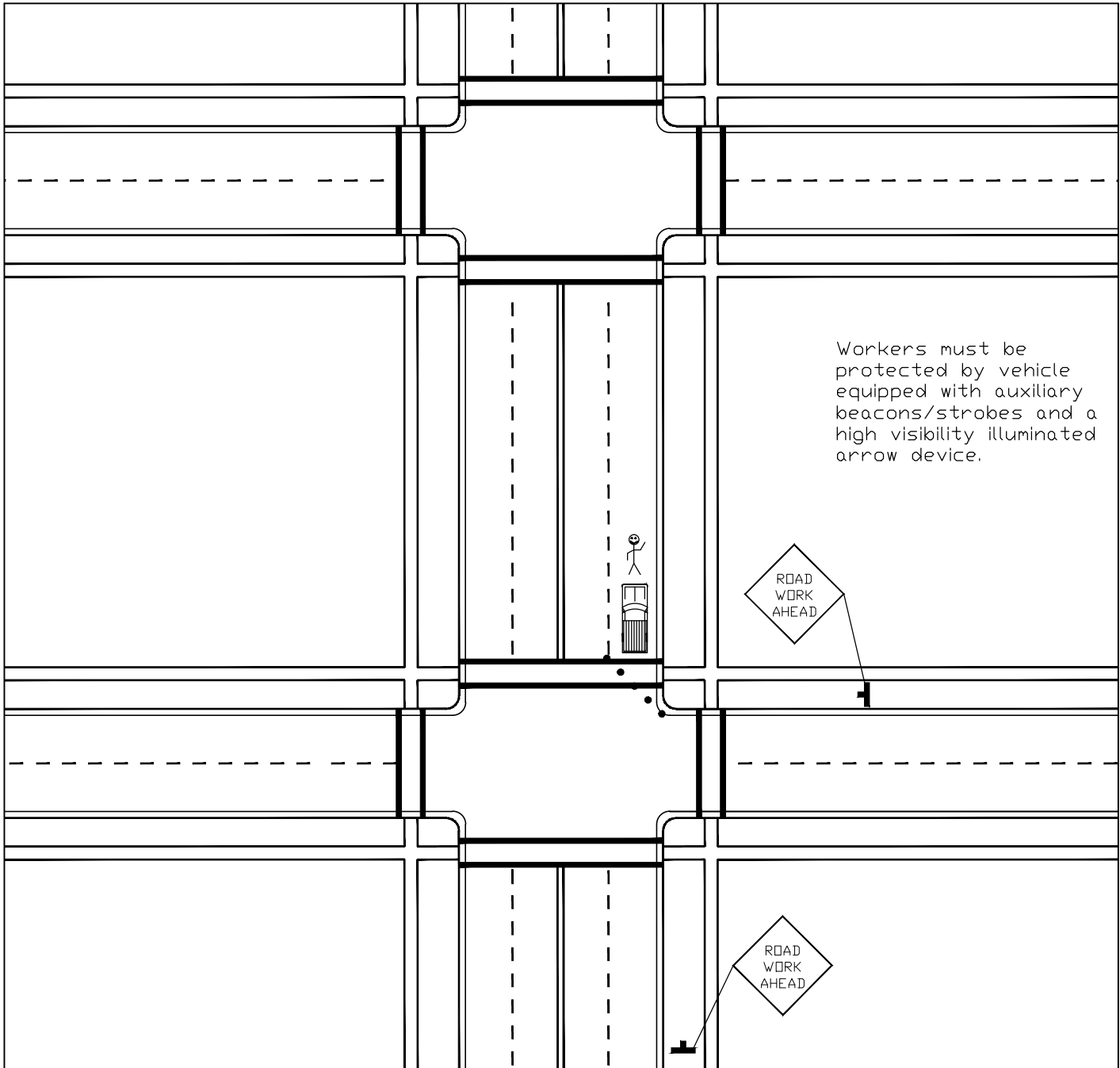
MPH	10	15	20	25	30	35	40	
LANE WIDTH	8'	14	30	54	84	120	164	214
	10'	17	38	67	105	150	204	267
	12'	20	45	80	125	180	245	320
	14'	24	53	94	146	210	286	374
	16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)								
Offset cones 1 foot maximum.								

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



LANE CLOSURE AT INTERSECTION UNDER 60 MINUTES

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

LANE WIDTH

NUMBER OF CHANNELIZATION DEVICES (CONES)

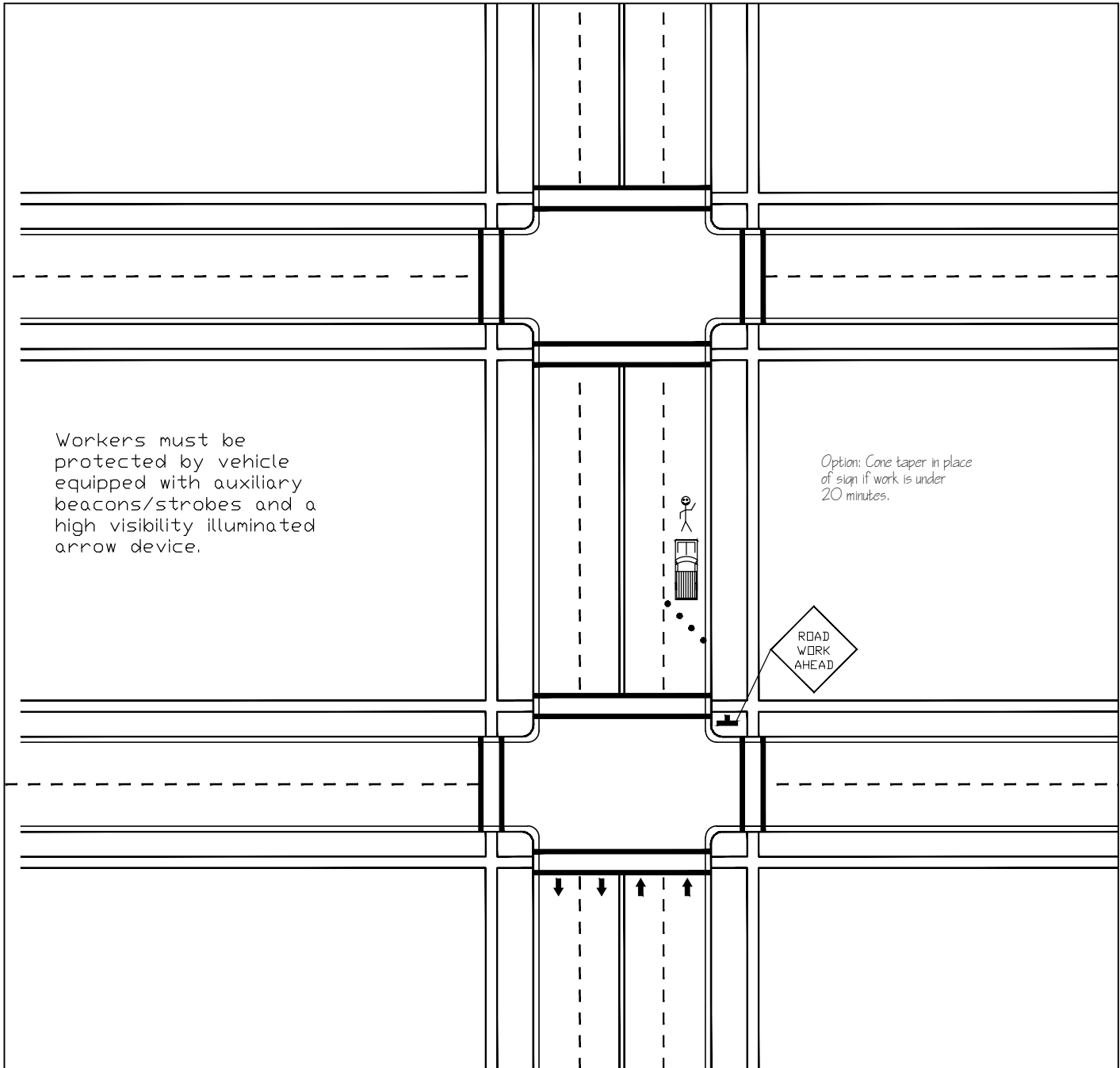
Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



MID-BLOCK LANE CLOSURE UNDER 60 MINUTES

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

LANE WIDTH

NUMBER OF CHANNELIZATION DEVICES (CONES)

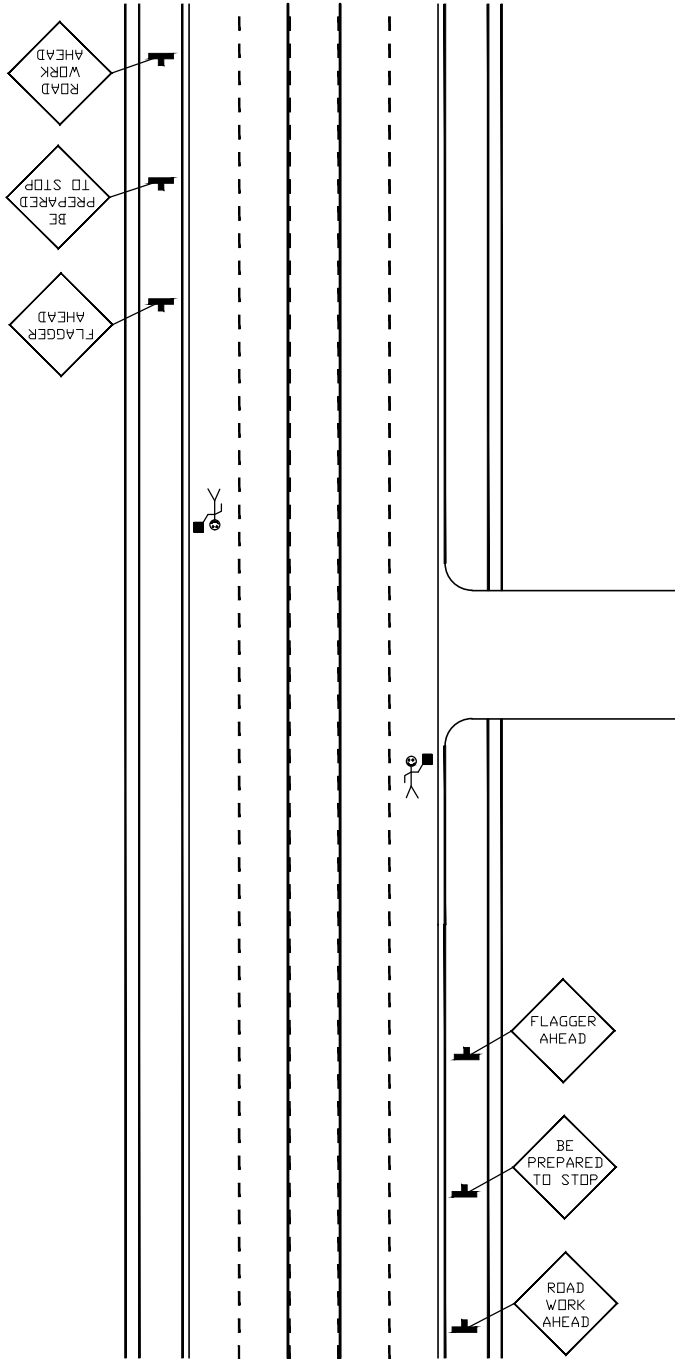
Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



TRAFFIC CONTROL RECOMMENDATIONS FOR TRUCK CROSSING

- ☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

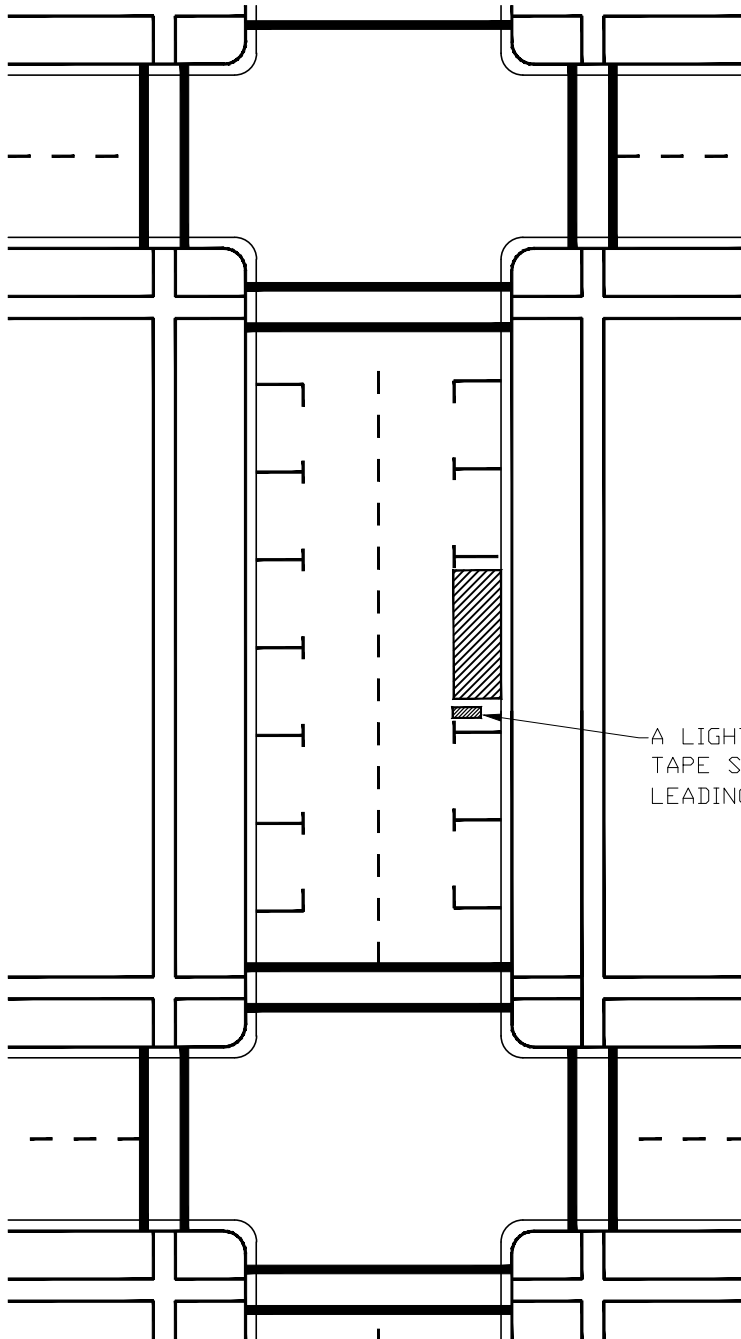
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



A LIGHTED BARRICADE OR REFLECTIVE TAPE SHALL BE INSTALLED ON THE LEADING EDGE OF THE DUMPSTER.

TRAFFIC CONTROL FOR A PORTABLE DUMPSTER

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

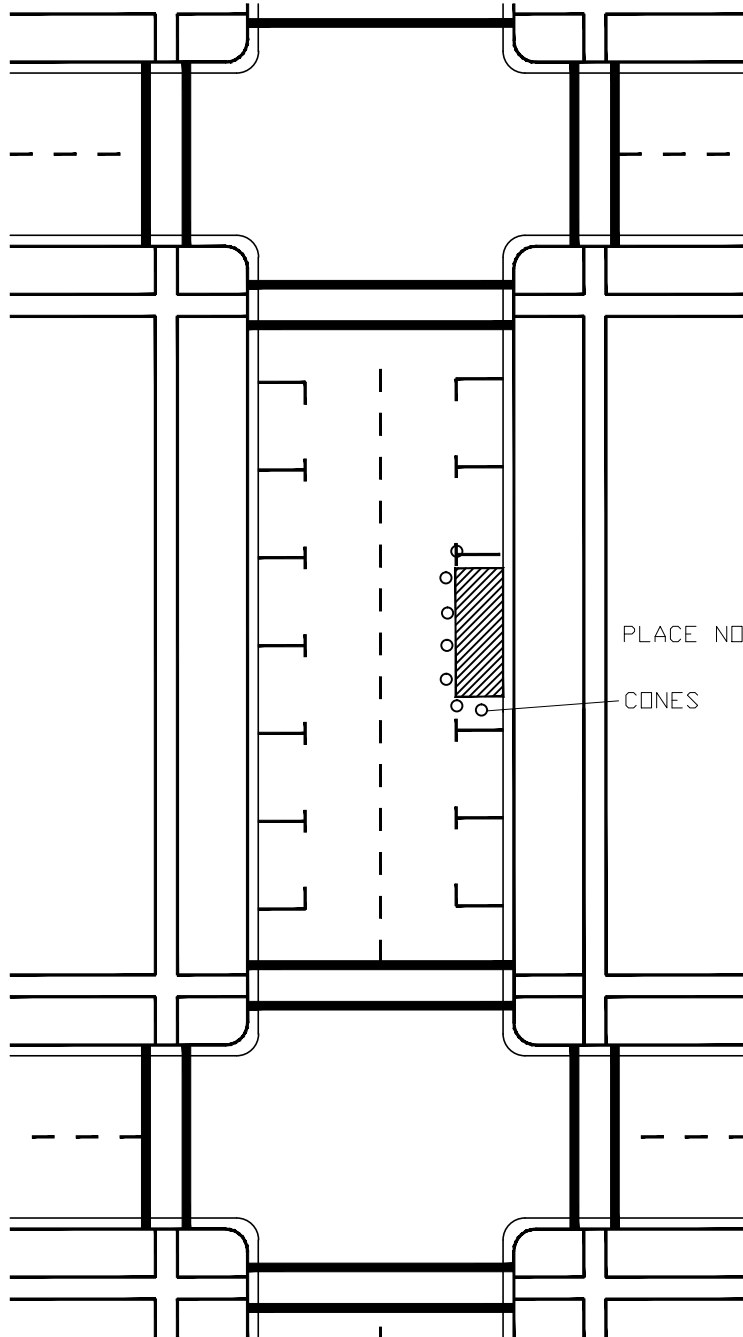
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



PLACE NO-PARK SIGNS 24HRS IN ADVANCE

CONES

TRAFFIC CONTROL FOR MOVING VAN

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

LANE WIDTH

NUMBER OF CHANNELIZATION DEVICES (CONES)

Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

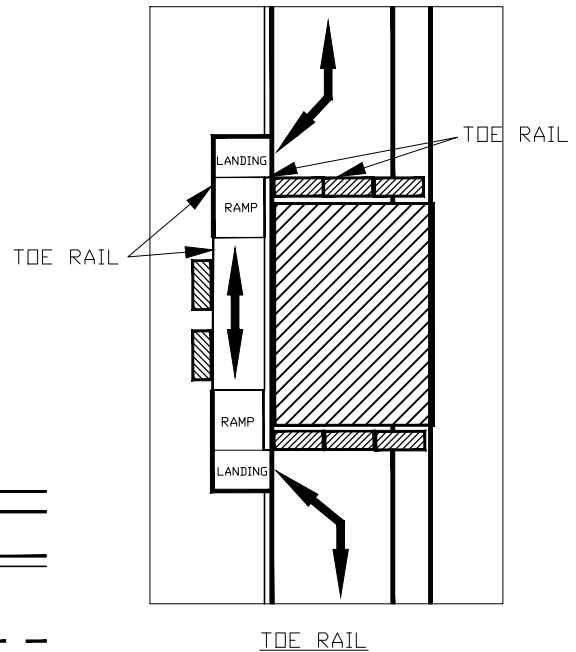
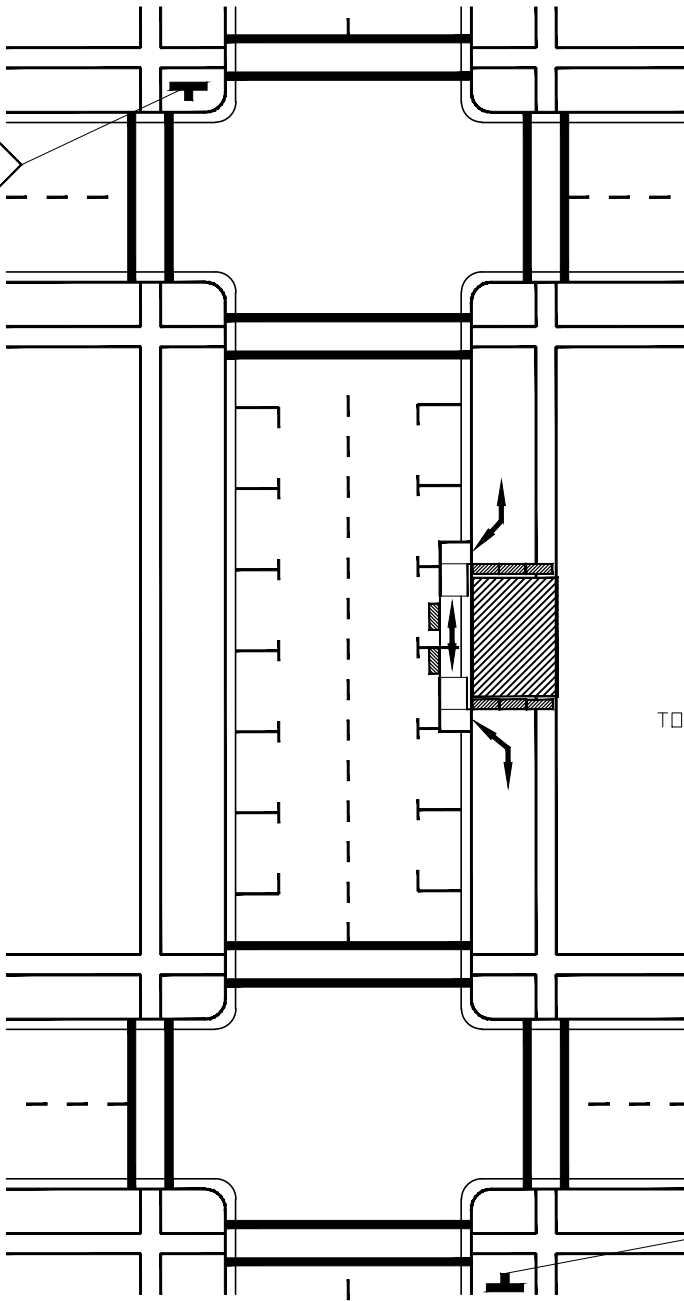
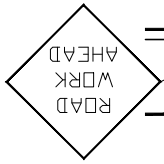
SAMPLE SETUP

NOTE:

PEDESTRIAN WALKWAYS SHALL BE A MINIMUM OF 5 FEET WIDE.

TOE RAIL ON RAMP ENTRANCE AND BARRICADE TOE RAIL SHALL HAVE NO GAPS AND BE PARALLEL.

SEE BYPASS RAMP DETAIL FOR PROPER CONSTRUCTION OF RAMP TO ALLOW FOR PEDESTRIAN AND DISABILITY ACCESS.



BYPASS
WALKWAY FOR
PEDESTRIANS

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

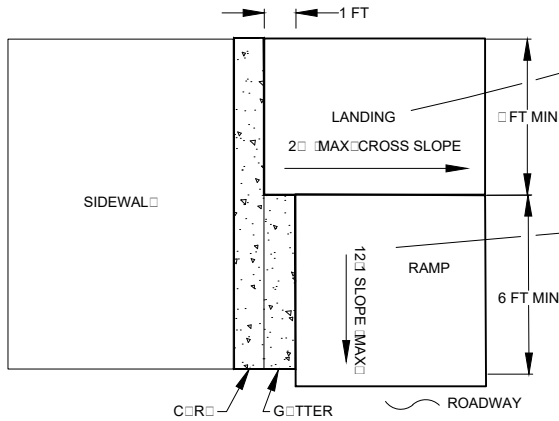
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

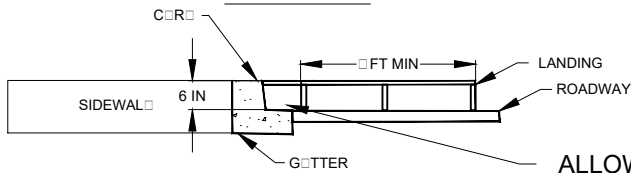
NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



TOP VIEW



SIDE VIEW

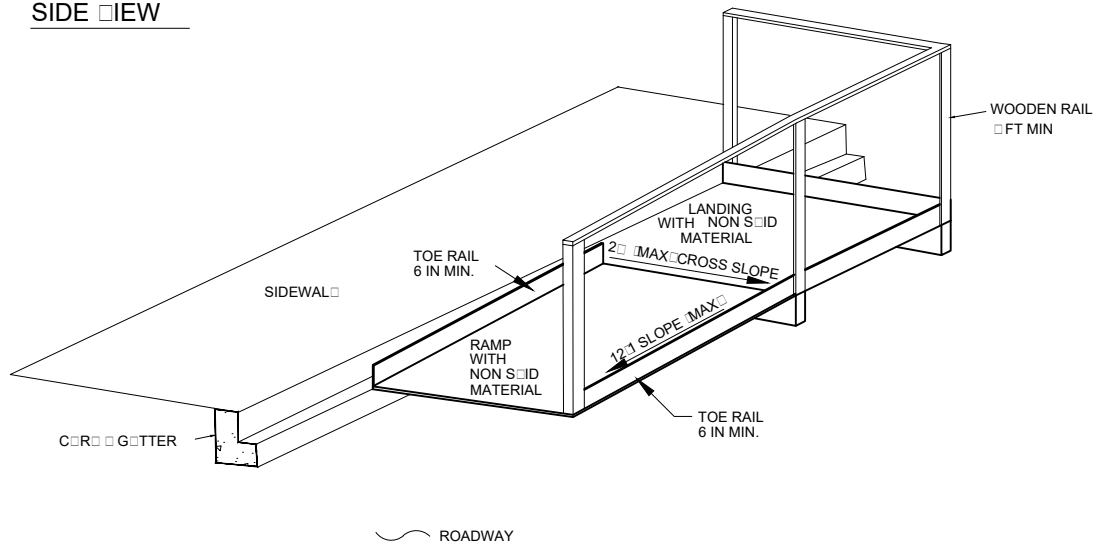
RAMP LANDING SHALL BE 1" X 6" X 6" MIN AND FLUSH WITH THE TOP OF THE CURB

RAMP SHALL BE 1" X 6" X 6" MIN AND HAVE A 600 POUND LOAD CAPACITY MIN.

NOTES

1. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING ANY CLOSURES.
2. ADA ACCOMODATIONS MUST BE ADDRESSED AND CONSIDERED FOR ALL WORK OPERATIONS. EXISTING ADA FACILITIES MUST BE MAINTAINED.

ALLOW FOR STORM DRAINAGE IN GUTTER LINE



PEDESTRIAN BYPASS RAMPS FOR TEMPORARY TRAFFIC CONTROL MINIMUM STANDARDS

APPROVED BY: _____
APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

TABLE 1

MPH	10	15	20	25	30	35	40
10	100	100	100	120	160	210	260
12	20	100	100	120	160	210	260
15	20	100	100	120	160	210	260
20	20	100	100	120	160	210	260
25	20	100	100	120	160	210	260
30	20	100	100	120	160	210	260
35	20	100	100	120	160	210	260
40	20	100	100	120	160	210	260

NUMBER OF CHANNELIZATION DEVICES (CONES)

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

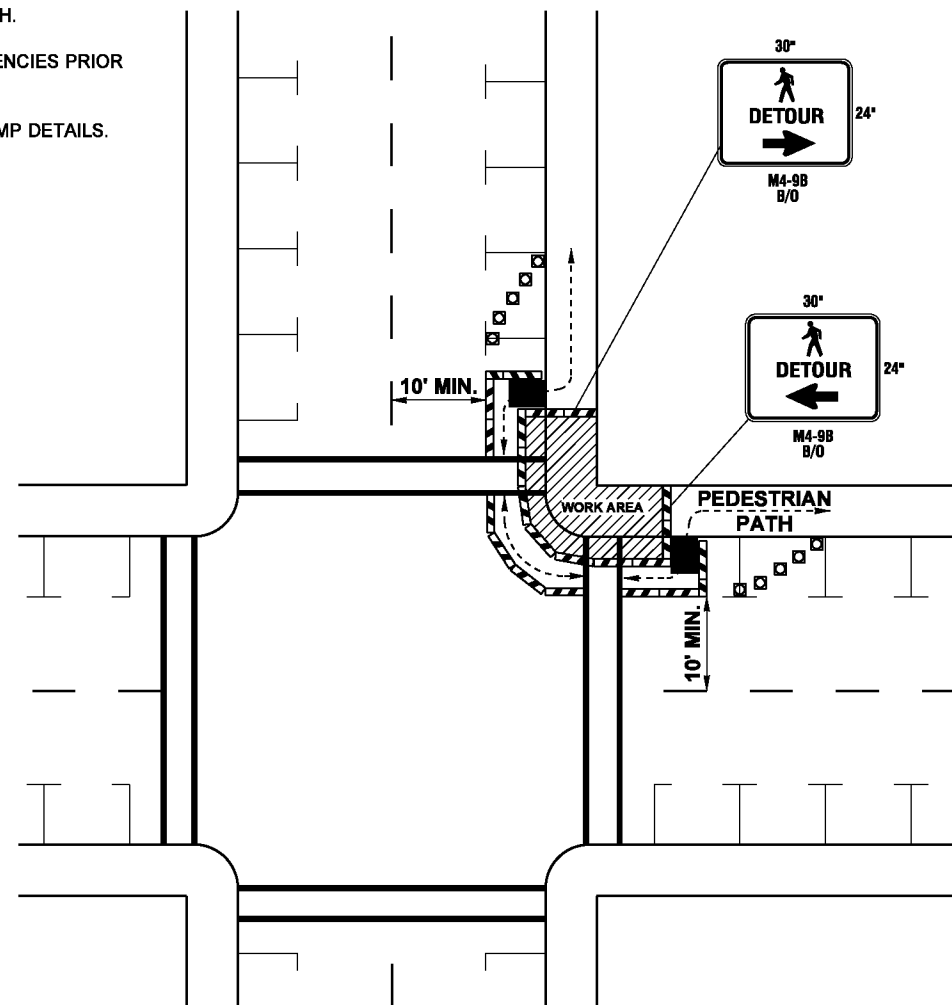


R8-3
24" x 30"
R/W

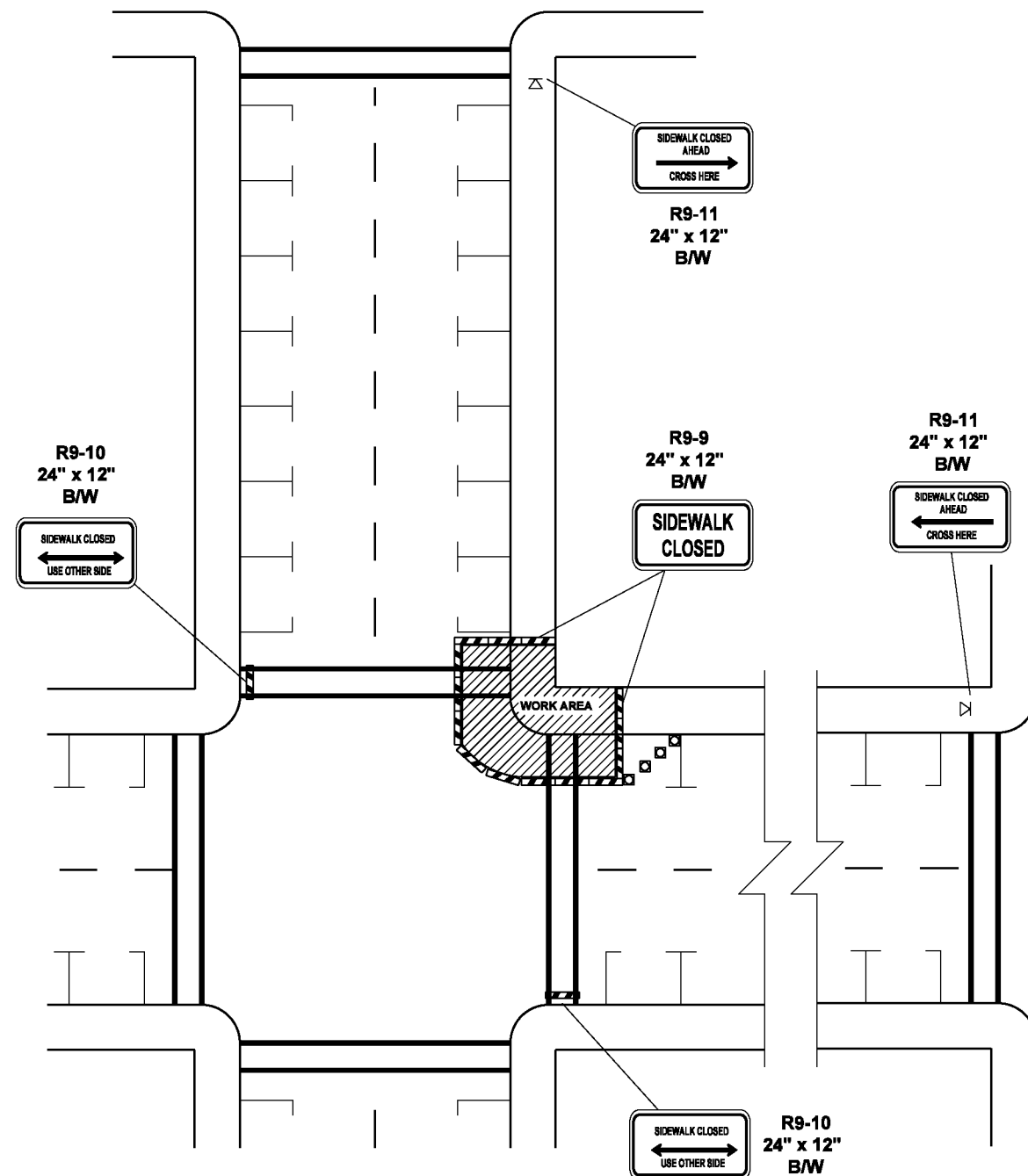
INSTALL ON TYPE 2 BARRICADES THROUGHOUT THE WORK AREA
24 HOURS PRIOR TO IMPLEMENTING TRAFFIC CONTROL.
PRIOR NOTIFICATION OF LOCAL LAW ENFORCEMENT REQUIRED.

NOTES:

1. CONTROLS SHOWN ARE FOR PEDESTRIAN TRAFFIC ONLY.
2. MAINTAIN A MINIMUM OF 48" FOR A PEDESTRIAN PATH.
3. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING ANY CLOSURES.
4. SEE SHEET TC-52 FOR TEMPORARY PEDESTRIAN RAMP DETAILS.
5. ADA PEDESTRIAN FACILITIES MUST BE MAINTAINED.



SIDEWALK DIVERSION



SIDEWALK DETOUR

LEGEND

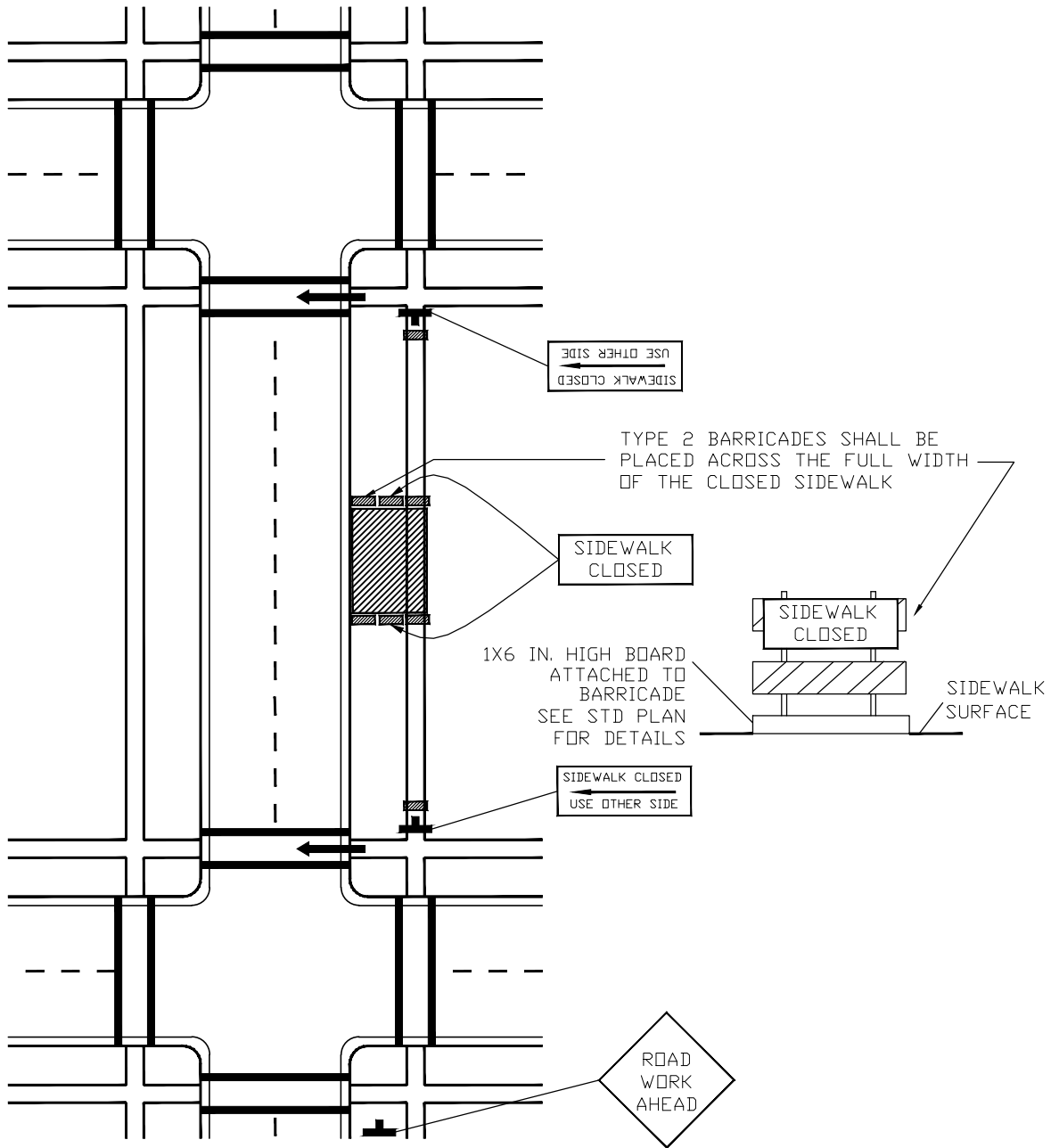
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PEDESTRIAN CHANNELIZING DEVICES
- TEMPORARY PEDESTRIAN RAMP FOR SIDEWALKS

INTERSECTION PEDESTRIAN TRAFFIC CONTROL

NOT TO SCALE

FILE NAME		S:\Design R P& SV4-Standards\2-Plan Sheet Library\10-Work Zone Traffic Control (TC)\TC-16\TC-16.dgn				REGION NO.		STATE	FED.AID PROJ.NO.		Washington State Department of Transportation		TC16	
TIME	9:18:30 AM					10	WASH						SHEET	
DATE	9/19/2012										PEDESTRIAN CONTROL AND PROTECTION		OF	
PLOTTED BY	CyfordL												SHEETS	
DESIGNED BY														
ENTERED BY														
CHECKED BY														
PROJ. ENGR.														
REGIONAL ADM.		REVISION		DATE	BY									

SAMPLE SETUP



SIDEWALK CLOSURE

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

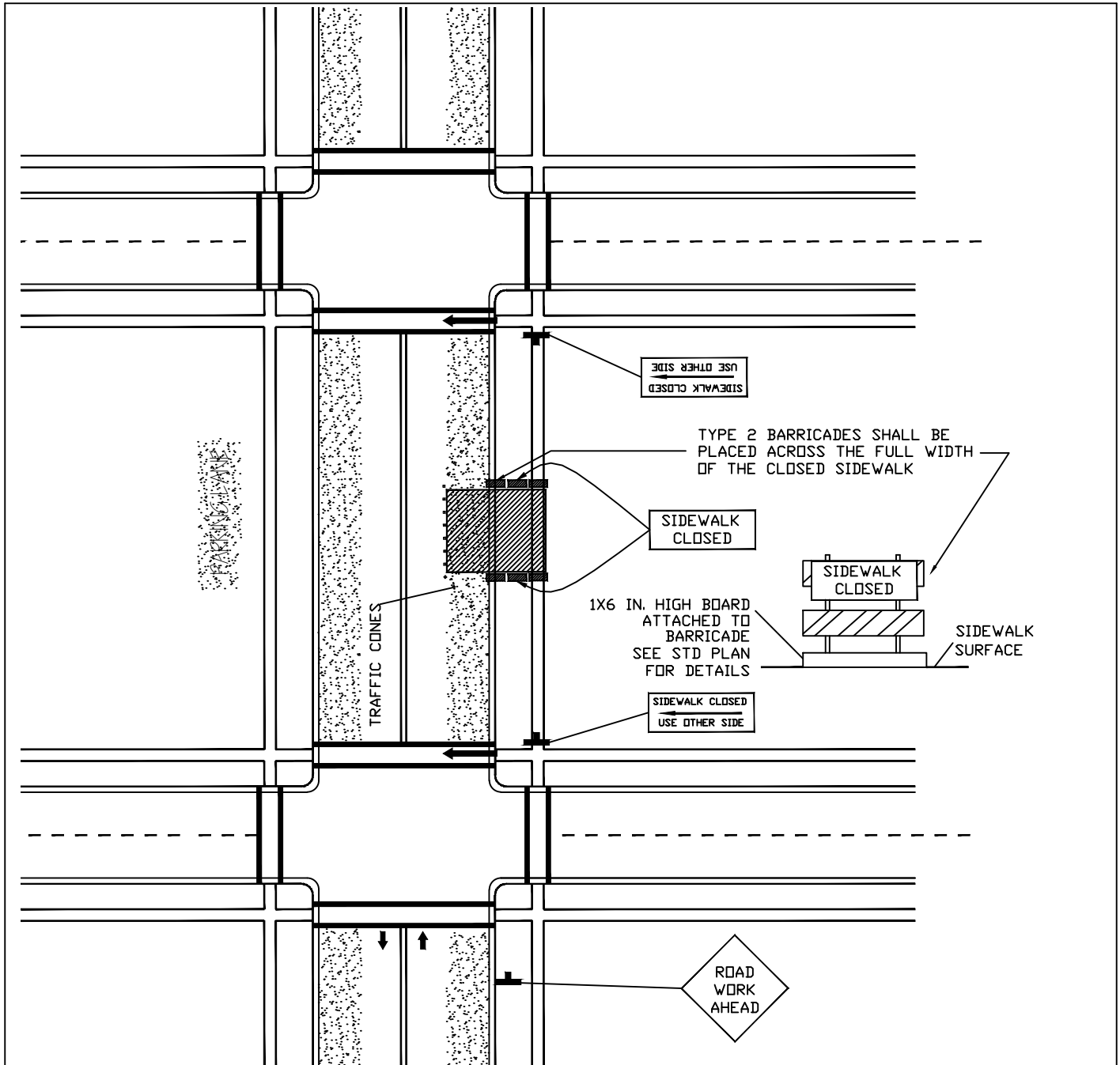
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



SIDEWALK / PARKING CLOSURE

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)

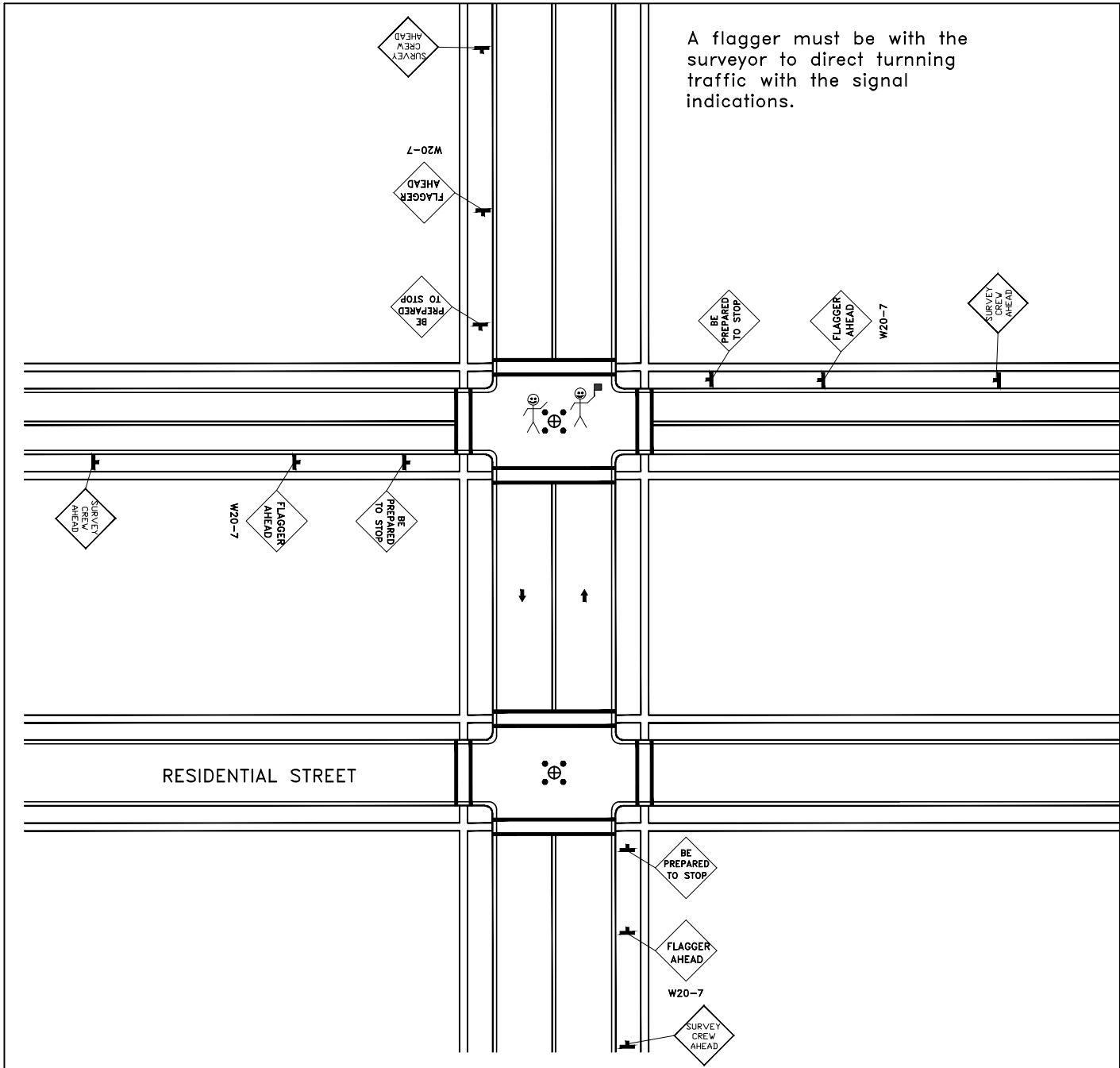
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



SURVEY TWO LANE ARTERIAL INTERSECTION

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

NUMBER OF CHANNELIZATION DEVICES (CONES)

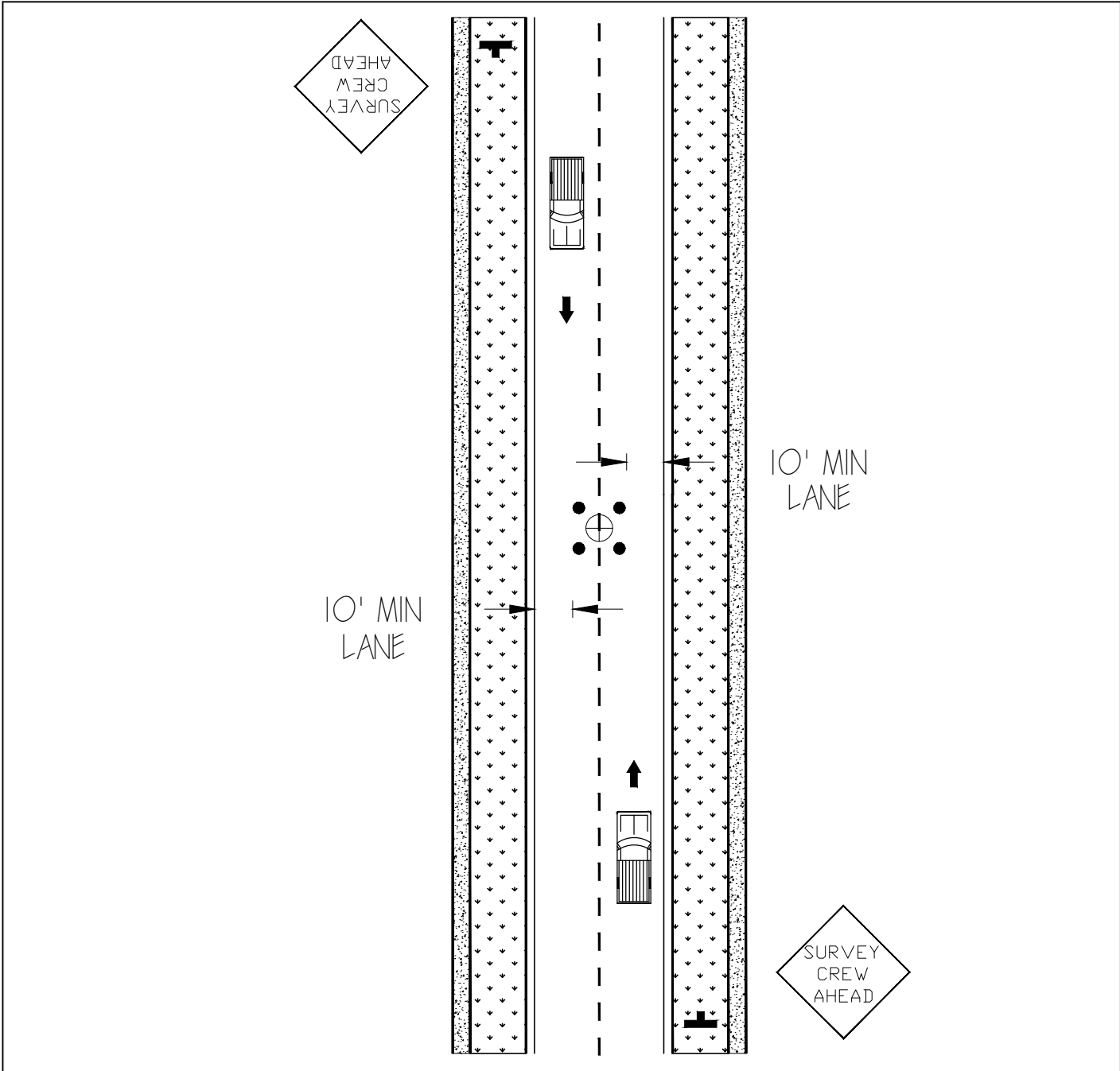
Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



SURVEY
TWO LANE ARTERIAL
MID-BLOCK

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS
FOR CONE PATTERN
(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

NUMBER OF CHANNELIZATION DEVICES (CONES)

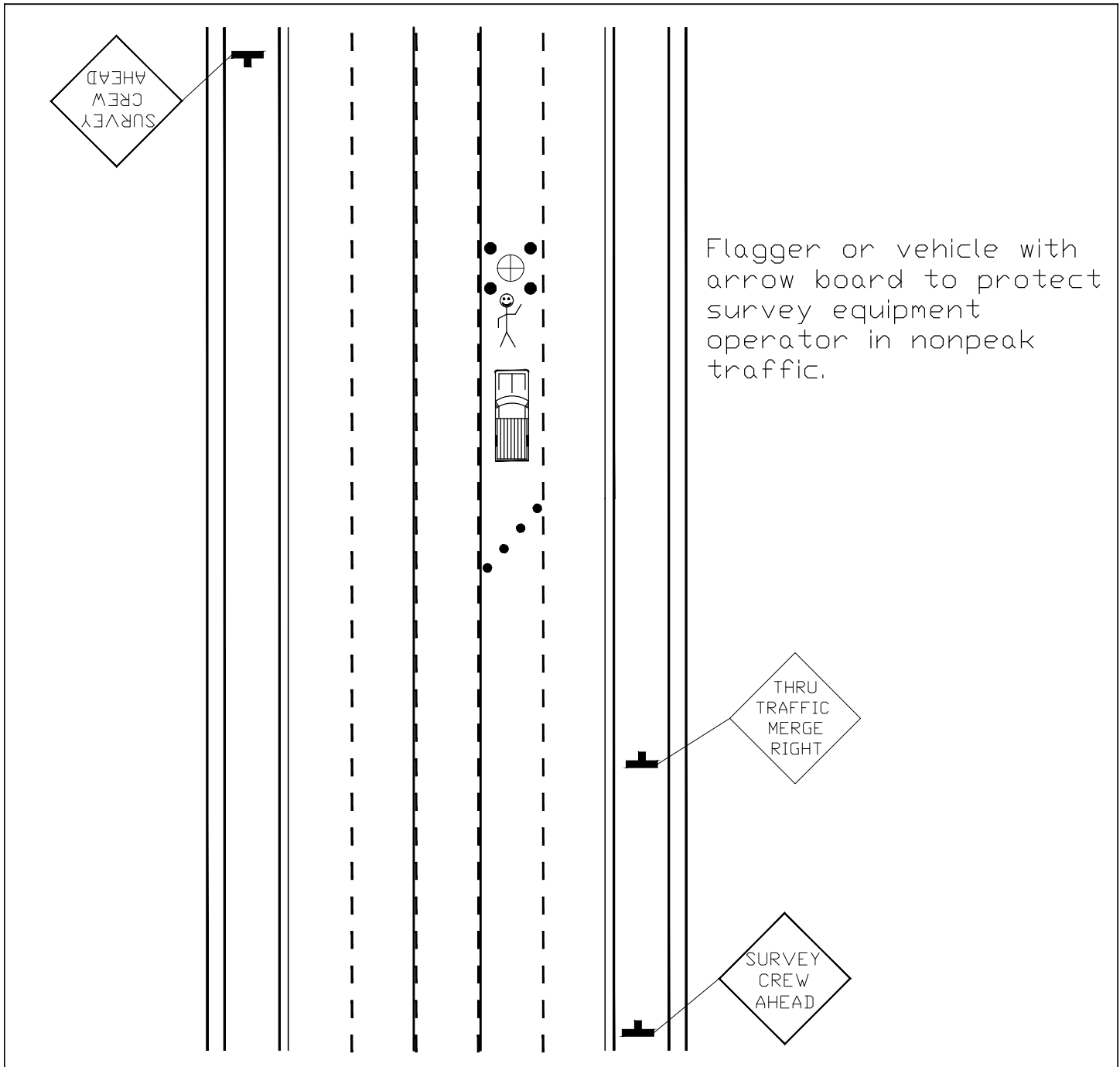
Offset cones 1 foot maximum.

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



SURVEY
MULTI-LANE
ARTERIAL

MERGING TAPER LENGTHS
FOR CONE PATTERN
(All minimums)

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC, AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

NOTE 2: NO WORK SHALL BE SCHEDULED ON STREETS OR WALKWAYS WITHIN THE CITY OF TACOMA BUSINESS DISTRICTS FROM THANKSGIVING DAY THROUGH NEW YEAR'S DAY.

NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP

TRAFFIC CONTROL
RECOMMENDATIONS

☐ APPROVED BY:

☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS
FOR CONE PATTERN
(All minimums)

MPH	10	15	20	25	30	35	40	
LANE WIDTH	8'	14	30	54	84	120	164	214
	10'	17	38	67	105	150	204	267
	12'	20	45	80	125	180	245	320
	14'	24	53	94	146	210	286	374
	16'	27	60	107	167	240	327	427
	NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.								

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

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NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

[illegible]

TRAFFIC CONTROL
RECOMMENDATIONS

☐ APPROVED BY:

☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

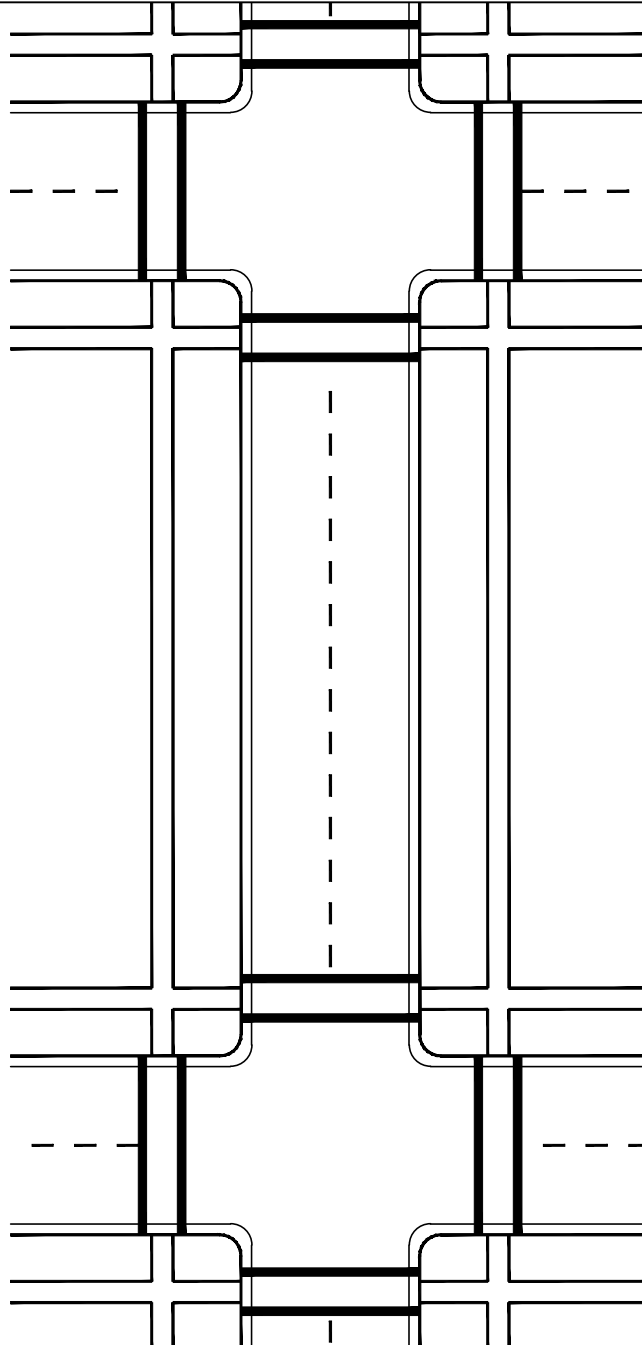
MERGING TAPER LENGTHS FOR CONE PATTERN (All minimums)								
MPH	10	15	20	25	30	35	40	
LANE WIDTH	8'	14	30	54	84	120	164	214
	10'	17	38	67	105	150	204	267
	12'	20	45	80	125	180	245	320
	14'	24	53	94	146	210	286	374
	16'	27	60	107	167	240	327	427
	NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.								

NOTE 1: MAINTAIN LOCAL ACCESS AND PROTECTED WALKWAYS AT ALL TIMES. PROVIDE AND MAINTAIN BARRICADES, SIGNS, LIGHTS, ETC., AS PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AT ALL TIMES. STREETS AND WALKWAYS SHALL BE KEPT CLEAR OF DEBRIS DROPPED OR TRACKED BY VEHICLES ENTERING OR EXITING THE WORK SITE. FAILURE TO COMPLY WILL RESULT IN A STOP WORK ORDER AND/OR CITATION.

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NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



TRAFFIC CONTROL RECOMMENDATIONS

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

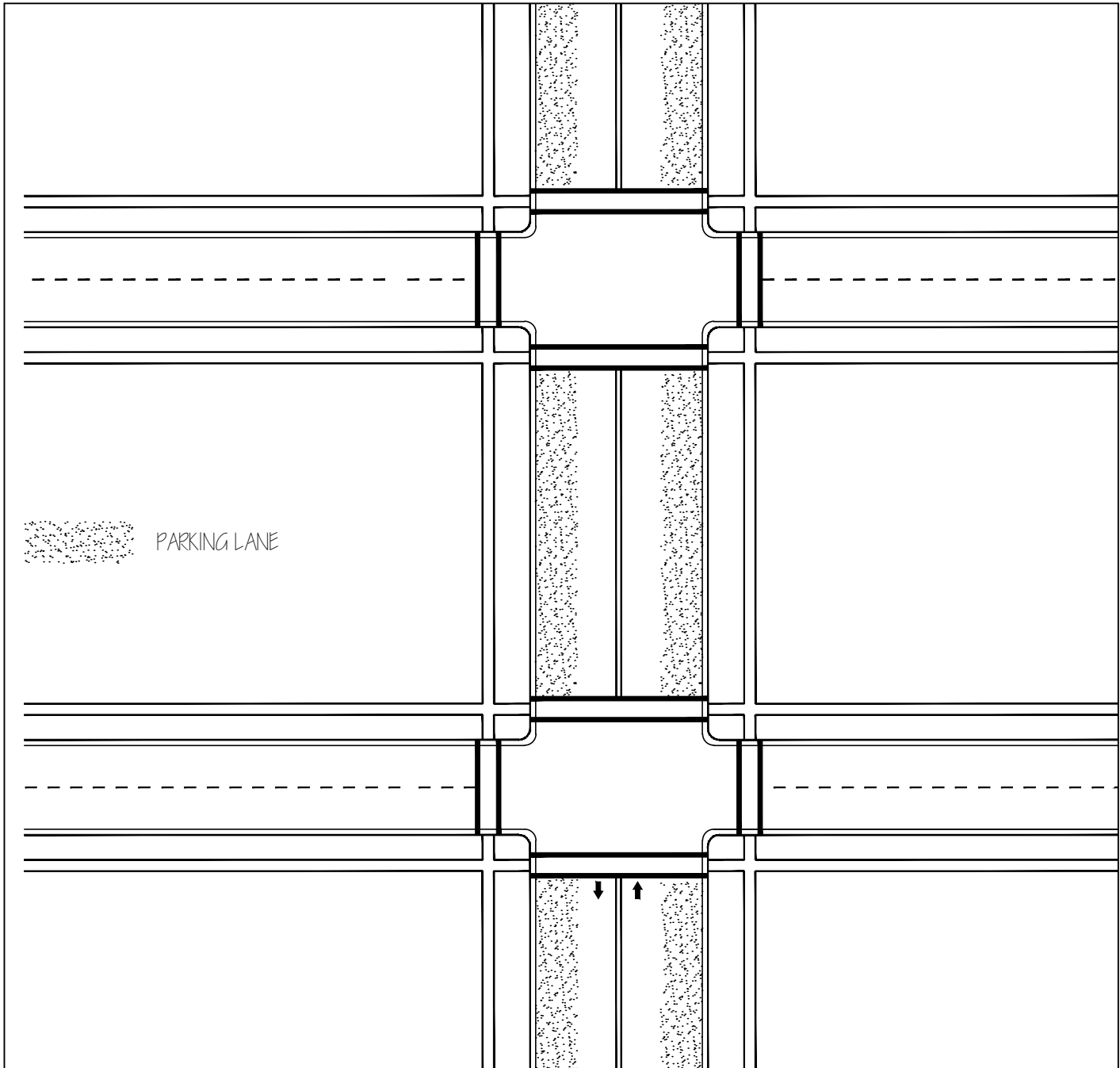
MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427
NUMBER OF CHANNELIZATION DEVICES (CONES)							
Offset cones 1 foot maximum.							

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NOTE 3: SIGN SPACING: URBAN LOW SPEED 25-30 MPH SIGNS MUST BE PLACED 100' APART. URBAN HIGH SPEED 35-40 MPH SIGNS MUST BE PLACED 350' APART.

SAMPLE SETUP



TRAFFIC CONTROL RECOMMENDATIONS

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS

MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY

START TRAFFIC CONTROL SET UP DATE & TIME: _____

MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS FOR CONE PATTERN

(All minimums)

MPH	10	15	20	25	30	35	40
8'	14	30	54	84	120	164	214
10'	17	38	67	105	150	204	267
12'	20	45	80	125	180	245	320
14'	24	53	94	146	210	286	374
16'	27	60	107	167	240	327	427

LANE WIDTH

NUMBER OF CHANNELIZATION DEVICES (CONES)

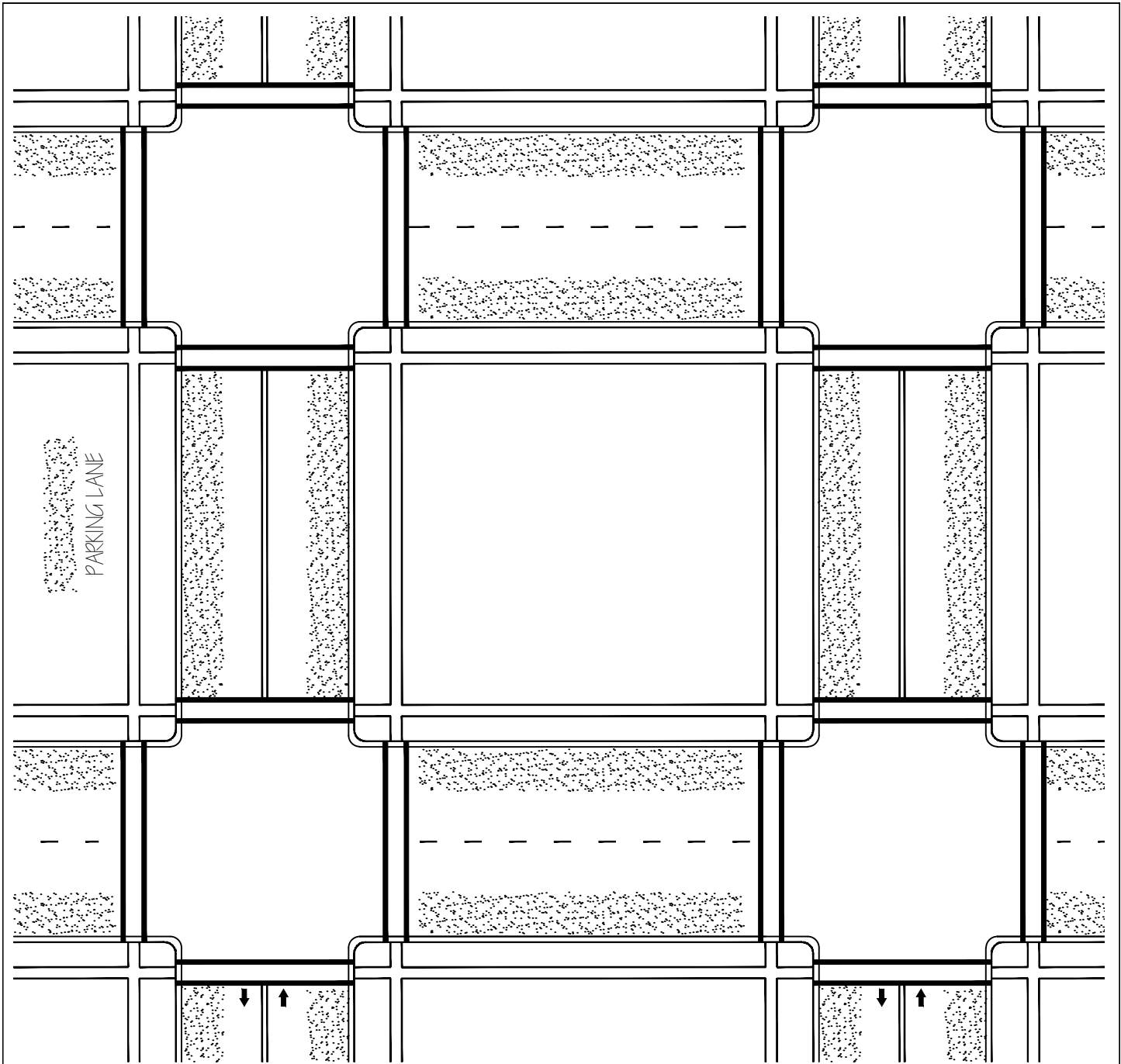
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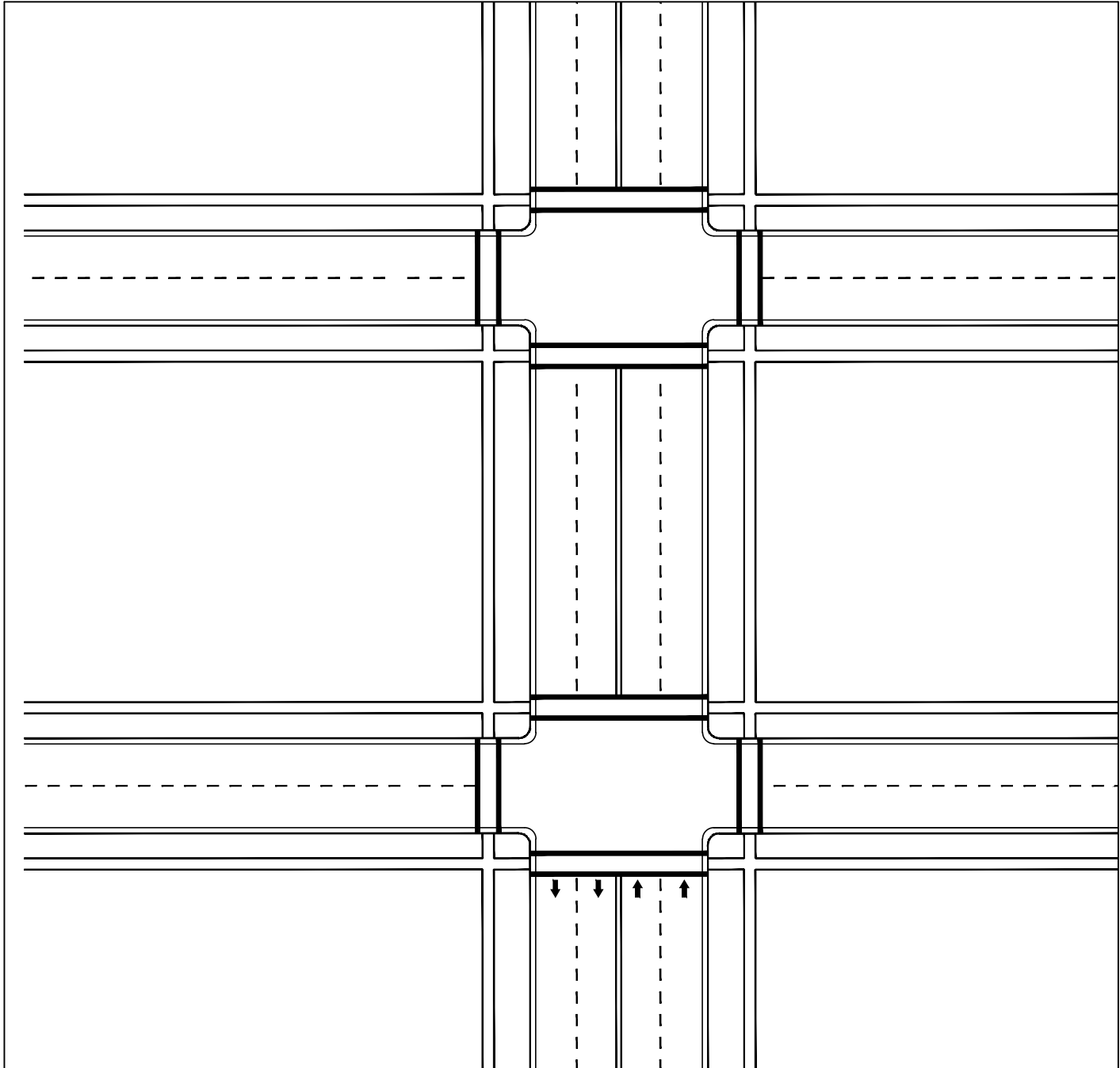
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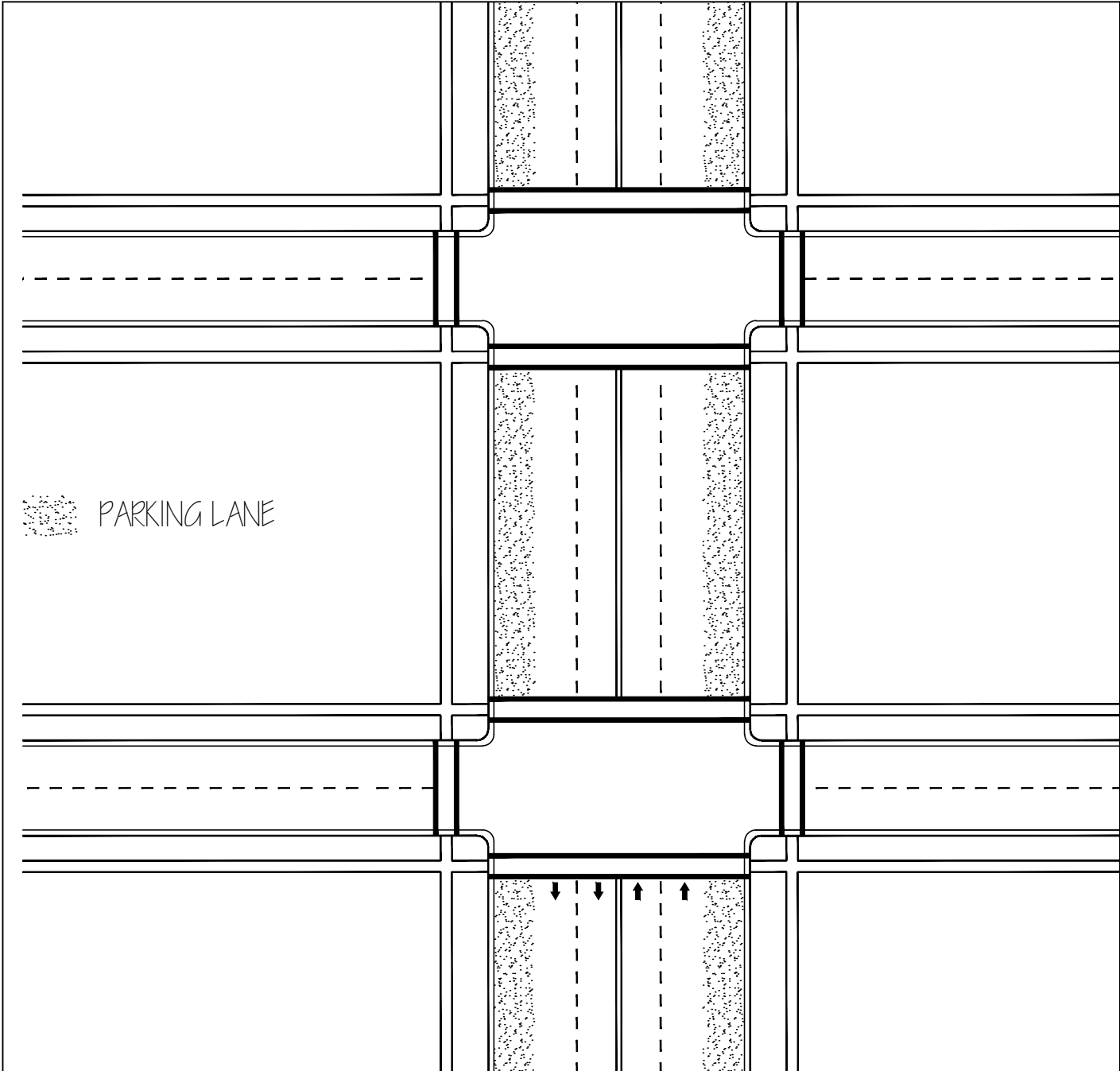
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SAMPLE SETUP



TRAFFIC CONTROL
RECOMMENDATIONS

☐ APPROVED BY: _____
☐ APPROVED WITH CONDITIONS BY: _____ DATE: _____

START TRAFFIC CONTROL SET UP DATE: _____ OFF PEAK 9:00 AM WEEKDAYS
MUST BE OUT OF THE ROAD BY DATE: _____ OFF PEAK 3:30 PM WEEKDAYS

EVENING AND WEEKENDS ONLY
START TRAFFIC CONTROL SET UP DATE & TIME: _____
MUST BE OUT OF THE ROAD BY DATE & TIME: _____

MERGING TAPER LENGTHS
FOR CONE PATTERN
(All minimums)

MPH	10	15	20	25	30	35	40	
LANE WIDTH	8'	14	30	54	84	120	164	214
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[illegible]

TRAFFIC CONTROL
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PART III

**CITY OF TACOMA
EQUITY IN CONTRACTING
PROGRAM**

EIC REQUIREMENT FORM

EQUITY IN CONTRACTING REQUIREMENTS & PROCEDURES:

All bidders must complete and submit with their bid the following solicitation form contained in the bid submittal package:

City of Tacoma – EIC Utilization Form

IMPORTANT NOTE:

It is the bidder's responsibility to insure that the subcontractor(s) listed on the EIC Utilization Form are currently certified by the State of Washington's Office of Minority and Women Business Enterprises (OMWBE) at the time of bid opening. This may be verified by contacting the EIC Office at 253-591-5075 between 8 AM and 5 PM, Monday through Friday or the [OMWBE](http://www.omwbe.com) Office at (866) 208-1064. Please refer to the City of Tacoma EIC code.

Equity in Contracting Requirements		
Minority Business Enterprise Requirement	Women Business Enterprise Requirement	Small Business Enterprise Requirement
6%	3%	5%

A list of EIC-eligible companies is available on the following web site addresses:

www.omwbe.diversitycompliance.com*

MATERIAL MISSTATEMENTS CONCERNING COMPLETED ACTIONS BY THE BIDDER IN ANY SWORN STATEMENT OR FAILURE TO MEET COMMITMENTS AS INDICATED ON THE EIC UTILIZATION FORM MAY RENDER THE BIDDER IN DEFAULT OF CITY ORDINANCE 1.07

CCD/SBE: 2020 Wastewater Sewer & Potable Water Replacement South J ST
Date of Record: 7/29/2021

*For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office if you have any questions.

City of Tacoma

Equity In Contracting Program Regulations

City of Tacoma Equity In Contracting Regulations Manual

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Introduction

This document serves as the administrative manual for the Equity in Contracting policy that is described in Tacoma Municipal Code (TMC) Chapter 1.07.040(B). The manual will explain how compliance, monitoring, oversight, requirement-making, bid incentives, and enforcement actions will be administered. The document will be regularly updated. For any questions related to this document, please contact the Equity in Contracting (EIC) office at (253)591-5075 or SBEOffice@cityoftacoma.org.

Goals/Requirements on Contracts

A. Requirements

1. Public Work
 - a. Minority Business Enterprise (MBE), Women Business Enterprise (WBE), and Small Business Enterprise (SBE) requirements are placed on all Public Work projects.
 - i. MBE, WBE, and SBE requirements are **mandatory**. As such, any bidder that does not meet any requirement shall be considered non-responsive by the Equity in Contracting office.

Contractors are also subject to the City's ordinances and regulations pertaining to having an affirmative action program and prohibiting discrimination. If needed, please contact the Equity in Contracting Office at 253-591-5075 for assistance. The list of MBE, WBE, and SBE certified firms from the Washington State Office of Minority and Women Owned Business Enterprises (OMWBE) can be found at: <https://omwbe.diversitycompliance.com/>

All SBE goals may be met by using DBE's or SBE's from the OMWBE list or the City of Tacoma SBE list. Please contact the Equity in Contracting Office for questions or to verify a firms status.

Contract Compliance

A. Benefits

The City of Tacoma must monitor compliance for all contracts that have requirements related to Equity in Contracting policies. Adequate monitoring allows the City to audit ongoing contracts for compliance, make necessary changes to the Equity in Contracting Regulations Manual based on real data, and to proactively monitor any possible discrimination on City of Tacoma-funded contracts.

B. Requirements

1. All contracts that have requirements related to the Equity in Contracting policy must utilize two cloud-based software solutions:
 - a. "B2GNow" for prime-contractor and sub-contractor payment compliance.
 - b. "LCP Tracker" for certified payroll compliance.
2. To access both systems, please use the following link:
<https://cityoftacoma.sbecompliance.com/?TN=cityoftacoma>
3. For support using these software solutions, please contact the Equity in Contracting office at (253)591-5075.

C. Key Performance Indicators

1. B2GNow
 - a. Ethnicity and Gender Summary

- i. Subcontractors Only
 - ii. With Primes
 - b. Prompt Payment Analysis
 - c. Prime Contractor Performance on Active Contracts
 - d. Contract Awards Summarized by Department
- 2. LCP Tracker
 - a. Apprentice Hours
 - i. By Trade
 - ii. By Contractor
 - b. Employment By Area
 - i. Zip Code
 - ii. Council Districts
 - c. Employment By Ethnicity

Waivers

B. Waivers. City departments/divisions or the Program Manager may request to waive one or more of the requirements of this chapter as they apply to a particular contract or contracts. Waivers may be granted in any one or more of the following circumstances:

1. **Emergency:** The supplies, services and/or public works must be provided with such immediacy that neither the City nor the contractor can comply with the requirements herein. Such emergency and waiver must be documented by the department/division awarding the contract.
2. **Not Practicable:** Compliance with the requirements of this chapter would impose an unwarranted economic burden or risk to the City after consideration of existing budgetary approvals.
3. **Sole source:** The supplies, services, and/or public works are available from only one source, and subcontracting possibilities do not reasonably exist as determined by the finance purchasing manager.
4. **Government purchasing.** The City is a party to or included in a federal, state or inter-local government purchasing agreement as approved by the finance purchasing manager.
5. **Lack of certified contractors:** An insufficient number of qualified contractors exist to create utilization opportunities.
6. **Best interests of the City:** Waiver of goals is in the best interests of the City due to unforeseen circumstances, provided that said circumstances are set forth in writing by the requestor.

C. Review of Waivers. If, after receipt of Submittals but prior to Contract award, it is determined that due to unforeseen circumstances, waiver of goals is in the best interests of the City, the Director or Superintendent of the department/division awarding the Contract may request in writing that the City Manager or designee, on behalf of General Government, or the Director of Utilities or designee, on behalf of the Department of Public Utilities, approve such waiver.

D. Waivers may be granted only after determination by the City Manager or Director of Utilities that compliance with the requirements of this chapter would impose unwarranted economic burden on, or risk to, the City of Tacoma as compared with the degree to which the purposes and policies of this chapter would be furthered by requiring compliance.

E. (Ord. 28766 Ex. A; passed Jun. 8, 2021; Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 27867 Ex. A; passed Dec. 15, 2009)

F. Key Performance Indicators

1. Total quantity of Waivers
 - a. By type number
 - b. Type 5 will also need to document the NAICS code referenced.

Version History

The version history is marked by day.month.year.version nomenclature. A higher version number denotes a more recent version. For example, a 1.1.2020.1 version would denote the first version made in January 1st of 2020. A 1.1.2020.3 version would denote the third version made on January 1st of 2020. When referencing a specific contract, be sure to note that the version of the administrative manual matches that which was in the bid specifications.

Current Version

7.01.2021.1

Previous Version(s)

2.21.2020.1, 3.11.2020.1

Chapter 1.07

Equity in Contracting

Sections:

- 1.07.010 Policy and purpose.
- 1.07.020 Definitions.
- 1.07.030 Discrimination prohibited.
- 1.07.040 Program administration.
- 1.07.050 Approval as a Certified Business.
- 1.07.060 Program requirements.
- 1.07.070 Evaluation of submittals.
- 1.07.080 Contract compliance.
- 1.07.090 Program monitoring.
- 1.07.100 Enforcement.
- 1.07.110 Remedies.
- 1.07.120 Unlawful acts.
- 1.07.130 Severability.
- 1.07.140 Review of program.

1.07.010 Policy and purpose.

It is the policy of the City of Tacoma that citizens be afforded an opportunity for full participation in our free enterprise system and that historically underutilized business enterprises shall have an equitable opportunity to participate in the performance of City contracts. The City finds that in its contracting for supplies, services and public works, there has been historical underutilization of small and minority-owned businesses located in certain geographically and economically disfavored locations and that this underutilization has had a deleterious impact on the economic well-being of the City. The purpose of this chapter is to remedy the effects of such underutilization through use of narrowly tailored contracting requirements to increase opportunities for historically underutilized businesses to participate in City contracts. It is the goal of this chapter to facilitate a substantial procurement, education, and mentorship program designed to promote equitable participation by historically underutilized businesses in the provision of supplies, services, and public works to the City. It is not the purpose of this chapter to provide any person or entity with any right, privilege, or claim, not shared by the public, generally, and this chapter shall not be construed to do so. This chapter is adopted in accordance with Chapter 35.22 RCW and RCW 49.60.400.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.020 Definitions.

Terms used in this chapter shall have the following meanings unless defined elsewhere in the Tacoma Municipal Code (“TMC”), or unless the context in which they are used clearly indicates a different meaning.

1.07.020.B

“Bid” means an offer submitted by a Respondent to furnish Supplies, Services, and/or Public Works in conformity with the Specifications and any other written terms and conditions included in a City request for such offer.

“Bidder” means an entity or individual who submits a Bid, Proposal or Quote. See also “Respondent.”

1.07.020.C

“Certified Business” means an entity that has been certified as a Disadvantaged Business Enterprise (“DBE”), Small Business Enterprise (“SBE”), Minority Business Enterprise (“MBE”), Women Business Enterprise (“WBE”), or Minority and Women’s Business Enterprise (“MWBE”) by the Washington State Office of Minority and Women’s Business Enterprise and meets the criteria set forth in Section 1.07.050 (2) of this chapter and has been approved as meeting that criteria by the Community and Economic Development Department Program Manager.

“City” means all Departments, Divisions and agencies of the City of Tacoma.

“Contract” means any type of legally binding agreement regardless of form or title that governs the terms and conditions for procurement of Public Works and Improvements and/or Non-Public Works and Improvements Supplies and Services. Contracts include the terms and conditions found in Specifications, Bidder or Respondent Submittals, and purchase orders issued by the City. A “Contract” as used in this chapter shall include an agreement between the City and a non-profit entity to perform construction-related services for Public Works. A “Contract” does not include: (1) awards made by the City with federal/state grant or City general funds monies to a non-profit entity where the City offers assistance, guidance, or supervision on a project or program, and the recipient of the grant awards uses the grant moneys to provide services to the

community; (2) sales transactions where the City sells its personal or real property; (3) a loan transaction where the City is acting as a debtor or a creditor; (4) lease, franchise; (5) agreements to use City real property (such as Licenses, Permits and Easements) and, (6) banking and other financial or investment services.

“Contractor” means any Person that presents a Submittal to the City, enters into a Contract with the City, and/or performs all or any part of a Contract awarded by the City, for the provision of Public Works, or Non-Public Works and Improvements, Supplies or Services.

1.07.020.G

“Goals” means the annual level of participation by Certified Businesses in City Contracts as established in this chapter, the Program Regulations, or as necessary to comply with applicable federal and state nondiscrimination laws and regulations. Goals for individual Contracts may be adjusted as provided for in this chapter and shall not be construed as a minimum for any particular Contract or for any particular geographical area.

1.07.020.N

“Non-Public Works and Improvements” means all competitively solicited procurement of Supplies and/or Services by the City not solicited as Public Works.

1.07.020.P

“Person” means individuals, companies, corporations, partnerships, associations, cooperatives, any other legally recognized business entity, legal representative, trustee, or receivers.

“Program Manager” means the individual appointed, from time to time, by the City’s Community and Economic Development Director to administer the Program Regulations.

“Program Regulations” means the written regulations and procedures adopted pursuant to this chapter for procurement of Supplies, Services and Public Works.

“Proposal” means a written offer to furnish Supplies or Services in response to a Request for Proposals. This term may be further defined in the Purchasing Policy Manual and/or in competitive solicitations issued by the City.

“Public Works (or “Public Works and Improvements)” means all work, construction, alteration, repair, or improvement other than ordinary maintenance, executed at the cost of the City, or that is by law a lien or charge on any property therein. This term includes all Supplies, materials, tools, and equipment to be furnished in accordance with the Contract for such work, construction, alteration, repair, or improvement.

1.07.020.Q

“Quote” means a competitively solicited written offer to furnish Supplies or Services by a method of procurement that is less formalized than a Bid or a Proposal. This term may be further defined in the Purchasing Policy Manual.

1.07.020.R

“Respondent” means any entity or Person, other than a City employee, that provides a Submittal in response to a request for Bids, Request for Proposals, Request for Qualifications, request for quotes or other request for information, as such terms are defined in Section 1.06.251 TMC. This term includes any such entity or Person whether designated as a supplier, seller, vendor, proposer, Bidder, Contractor, consultant, merchant, or service provider that; (1) assumes a contractual responsibility to the City for provision of Supplies, Services, and/or Public Works; (2) is recognized by its industry as a provider of such Supplies, Services, and/or Public works; (3) has facilities similar to those commonly used by Persons engaged in the same or similar business; and/or (4) distributes, delivers, sells, or services a product or performs a Commercially Useful Function.

1.07.020.S

“Services” means non-Public Works and Improvements services and includes professional services, personal services, and purchased services, as such terms are defined in Section 1.06.251 TMC and/or the City’s Purchasing Policy Manual.

“Submittal” means Bids, Proposals, Quotes, qualifications or other information submitted in response to requests for Bids, Requests for Proposals, Requests for Qualifications, requests for Quotations, or other City requests for information, as such terms are defined in Section 1.06.251 TMC.

“Supplies” means materials, Supplies, and other products that are procured by the City through a competitive process for either Public Works procurement or Non-Public Works and Improvements procurement unless an approved waiver has been granted by the appropriate authority.

1.07.020.T

“Tacoma Public Utilities Service Area” means any ZIP code in which Tacoma Public Utilities maintains infrastructure or provides retail services.

1.07.020.W

“Waiver” means a discretionary decision by the City that the one or more requirements of this chapter will not be applied to a Contract or Contracts.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28274 Ex. A; passed Dec. 16, 2014: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.030 Discrimination prohibited.

A. No person that is engaged in the construction of public works for the City, engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services to the City, shall discriminate against any other person on the basis of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, or the presence of any sensory, mental or physical disability in employment. Such discrimination includes the unfair treatment or denial of normal privileges to a person as manifested in employment upgrades, demotions, transfers, layoffs, termination, rates of pay, recruitment of employees, or advertisement for employment.

B. The violation of the terms of RCW 49.60 or Chapter 1.29 TMC by any person that is engaged in the construction of public works for the City, is engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services shall result in the rebuttable presumption that the terms of this chapter have also been violated. Such violation may result in termination of any City contract the violator may have with the City and/or the violator’s ineligibility for further City Contracts.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.040 Program administration.

A. The Community and Economic Development Director, or their designated Program Manager, shall be responsible for administering this chapter and obtaining compliance with respect to contracts entered into by the City and/or its contractors. It shall be the duty of the Director to pursue the objectives of this chapter by conference, conciliation, persuasion, investigation, or enforcement action, as may be necessary under the circumstances. The Director is authorized to implement an administrative and compliance program to meet these responsibilities and objectives.

B. The Director is hereby authorized to adopt and to amend administrative regulations known as the Program Regulations, to properly implement and administer the provisions of this chapter. The Program Regulations shall be in conformance with City of Tacoma policies and state and federal laws and be designed to encourage achievement of the Goals set forth herein.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.050 Approval as a Certified Business.

A. The Program Manager shall approve an entity as a Certified Business if all of the following criteria are satisfied:

1. The entity is certified as a DBE, SBE, MBE, WBE, or MWBE through the state of Washington’s Office of Minority & Women Business Enterprises; and
2. The entity can demonstrate that it also meets at least one of the following additional requirements:
 - a. The personal residence of the owner is located within the City of Tacoma or Tacoma Public Utilities Service Area, or
 - b. The entity’s business offices are located in any county of the Tacoma Public Utilities Service Area or any county adjacent to Pierce County, or
 - c. When the work is performed outside of Pierce County, the entity’s business offices may be located in an adjacent county in which the work is performed, or
 - d. Such additional information as the Program Manager or designee may require.
3. When another governmental entity has an equivalent business classification process, the City may enter into an interlocal cooperative agreement for mutual recognition of certifications.

B. Appeals.

The applicant may appeal any approval determination by the Program Manager under this chapter to the Director. The appeal must be made in writing and must set forth the specific reasons for the appeal. The Director shall make a decision on the appeal request within a reasonable time, which decision shall be final unless further appeal is made to the Hearing Examiner. In that event, the Hearing Examiner Rules of Procedure for Hearings, Chapter 1.23 TMC, shall be applicable to that appeal proceeding.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28274 Ex. A; passed Dec. 16, 2014: Ord. 28147 Ex. A; passed May 7, 2013: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.060 Program requirements.

A. The program shall meet the following requirements:

1. Establishment of Annual Goals.

The Program Regulations adopted pursuant to this chapter shall state reasonably achievable cumulative annual goals for utilization of Certified Businesses in the provision of supplies, services, and public works procured by the City. Cumulative annual goals for the participation of Certified Businesses in City contracts shall be based on the number of qualified Certified Businesses operating within the Tacoma Public Utilities Service Area. The dollar value of all contracts awarded by the City to Certified Businesses in the procurement of supplies, services, and public works shall be counted toward the accomplishment of the applicable goal.

2. Application of Annual Goals to Contracts.

The Program Manager shall consult with City departments/divisions to establish department/division specific goals for competitively solicited contracts in accordance with this chapter and the Program Regulations.

B. Exceptions:

City departments/divisions or the Program Manager may request an exception to one or more of the requirements of this chapter as they apply to a particular Contract or Contracts. Exceptions may be granted in any one or more of the following circumstances:

1. Emergency:

The supplies, services and/or public works must be provided with such immediacy that neither the City nor the contractor can comply with the requirements herein. Such emergency will be deemed documented whenever a waiver of competitive solicitation for emergency situations is authorized under Tacoma Municipal Code Chapter 1.06.257 or as may be hereinafter amended.

2. Not Practicable:

The Contract involves special facilities or market conditions or specially tailored or performance criteria-based products, such that compliance with the requirements of this chapter would cause financial loss to the City or an interruption of vital services to the public. Such circumstances must be documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over \$500,000 (excluding sales tax), approved by the Board of Contracts and Awards ("C&A Board").

3. Sole source:

The supplies, services, and/or public works are available from only one feasible source, and subcontracting possibilities do not reasonably exist as documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over \$500,000 (excluding sales tax), approved by the C&A Board.

4. Government purchasing.

The Contract or Contracts are the result of a federal, state or inter-local government purchasing agreement and the use of such agreement in lieu of a bid solicitation conducted by the City is approved by the senior financial manager.

5. Lack of certified contractors:

An insufficient number of qualified contractors exist to create any utilization opportunities as documented by the Program Manager.

C. Waiver:

If, after receipt of Submittals but prior to Contract award, it is determined that due to unforeseen circumstances, waiver of goals is in the best interests of the City, the Director or Superintendent of the department/division awarding the Contract may

request in writing that the City Manager or designee, on behalf of General Government, or the Director of Utilities or designee, on behalf of the Department of Public Utilities, approve such waiver..

Waivers may be granted only after determination by the City Manager or Director of Utilities that compliance with the requirements of this chapter would impose unwarranted economic burden on, or risk to, the City of Tacoma as compared with the degree to which the purposes and policies of this chapter would be furthered by requiring compliance.

(Ord. 28766 Ex. A; passed Jun. 8, 2021; Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.070 Evaluation of submittals.

A. All submittals for a supplies, services, or public works and improvements contracts shall be evaluated for attainment of the Certified Business requirements established for that contract in accordance with this chapter and the Program Regulations.

B. The determination of Certified Business usage and the calculation of Certified Business requirements per this section shall include the following considerations:

1. General.

The dollar value of the contract awarded by the City to a Certified Business in the procurement of supplies, services, or public works shall be counted toward achievement of the respective goal.

2. Supplies.

A public works and improvements contractor may receive credit toward attainment of the Certified Business requirement(s) for expenditures for supplies obtained from a Certified Business; provided such Certified Business assumes the actual and contractual responsibility for delivering the supplies with its resources. The contractor may also receive credit toward attainment of the Certified Business goal for the amount of the commission paid to a Certified Business resulting from a supplies contract with the City; provided the Certified Business performs a commercially useful function in the process.

3. Services and Public Works subcontracts.

Any bid by a Certified Business or a bidder that utilizes a Certified Business shall receive credit toward requirement attainment based on the percentage of Certified Business usage demonstrated in the bid. A contractor that utilizes a Certified Business as a subcontractor to provide services or public works shall receive a credit toward the contractor's attainment of the respective requirement based on the value of the subcontract with that firm.

4. Brokers, Fronts, or Similar Pass-Through Arrangements.

Certified Business acting as brokers, fronts, or similar pass-through arrangements (as such terms are defined in the Program Regulations) shall not count toward the requirement attainment unless the activity reflects normal industry practices and the broker performs a commercially useful function.

C. Evaluation of competitively solicited submittals for public works and improvements and for services when a requirement has been established for the contract to be awarded shall be as follows:

1. When contract award is based on price.

The lowest priced bid submitted by a responsive and responsible bidder will be reviewed to determine if it meets the requirement. Certified Businesses may self-count utilization on such bids if they will perform the work for the scope the requirement is based upon.

a. If the low bidder meets the requirements, the bid shall be presumed the lowest and best responsible bid for contract award.

b. Any bidder that does not meet the stated Certified Business requirements shall be considered a non-responsible bidder unless a waiver of one or more of the requirements of this chapter is granted, in the City's sole discretion, pursuant to the criteria and processes in Tacoma Municipal Code 1.07.060.C.

2. When contract award is based on qualifications or other performance criteria in addition to price, solicitations shall utilize a scoring system that promotes participation by certified contractors. The Program Regulations may establish further requirements and procedures for final selection and contract award, including:

a. Evaluation of solicitations for Architectural and Engineering (A&E) services;

b. Evaluation and selection of submittals in response to requests for proposals; and

c. Selection of contractors from pre-qualified roster(s).

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.080 Contract compliance.

A. The contractor awarded a contract based on Certified Business participation shall, during the term of the contract, comply with the requirements established in said contract. To ensure compliance with this requirement following contract award, the following provisions apply:

1. Any substitutions for or failure to utilize Certified Business projected to be used must be approved in advance by the Program Manager. Substitution of one Certified Business with another shall be allowed where there has been a refusal to execute necessary agreements by the original Certified Business, a default on agreements previously made or other reasonable excuse; provided that the substitution does not increase the dollar amount of the bid.
2. Where it is shown that no other Certified Business is available as a substitute and that failure to secure participation by the Certified Business identified in the solicitation is not the fault of the respondent, substitution with a non-Certified Business shall be allowed; provided, that, the substitution does not increase the dollar amount of the bid.
3. If the Program Manager determines that the contractor has not reasonably and actively pursued the use of replacement Certified Business, such contractor shall be deemed to be in non-compliance.

B. Record Keeping.

All contracts shall require contractors to maintain relevant records and information necessary to document compliance with this chapter and the contractor's utilization of Certified Businesses, and shall include the right of the City to inspect such records.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.090 Program monitoring.

A. An Advisory Committee shall monitor compliance with all provisions of this chapter and the related Regulations. The Program Manager shall establish procedures to collect data and monitor the effect of the provisions of this chapter to assure, insofar as is practical, that the remedies set forth herein do not disproportionately favor one or more racial, gender, ethnic, or other protected groups, and that the remedies do not remain in effect beyond the point that they are required to eliminate the effects of under utilization in City contracting, unless such provisions are supported by a Disparity Study. The Program Manager shall have the authority to obtain from City departments/divisions, respondents, and contractors such relevant records, documents, and other information as is reasonably necessary to determine compliance.

B. The Program Manager shall submit an annual report to the Community and Economic Development Director, Director of Utilities, and the City Manager detailing performance of the program. The report shall document Certified Business utilization levels, waivers, proposed modifications to the program, and such other matters as may be specified in the Program Regulations.

(Ord. 28766 Ex. A; passed Jun. 8, 2021: Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.100 Enforcement.

The Director, or designee, may investigate the employment practices of contractors to determine whether or not the requirements of this chapter have been violated. Such investigation shall be conducted in accordance with the procedures established in the Program Regulations.

(Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 28141 Ex. A; passed Mar. 26, 2013: Ord. 28110 Ex. B; passed Dec. 4, 2012: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.110 Remedies.

A. Upon receipt of a determination of contractor violation by the Program Manager, the City Manager or Director of Utilities, as appropriate, may take the following actions, singly or together, as appropriate:

1. Forfeit the contractor's bid bond and/or performance bond;
2. Publish notice of the contractor's noncompliance;
3. Cancel, terminate, or suspend the contractor's contract, or portion thereof;

4. Withhold funds due contractor until compliance is achieved; and/or

5. Recommend appropriate action including, but not limited to, disqualification of eligibility for future contract awards by the City (debarment) per Section 1.06.279 TMC;

B. Prior to exercise of any of the foregoing remedies, the City shall provide written notice to the contractor specifying the violation and the City's intent to exercise such remedy or remedies. The notice shall provide that each specified remedy becomes effective within ten business days of receipt unless the contractor appeals said action to the Hearing Examiner pursuant to Chapter 1.23 TMC.

C. When non-compliance with this chapter or the Program Regulations has occurred, the Program Manager and the department/division responsible for enforcement of the contract may allow continuation of the contract upon the contractor's development of a plan for compliance acceptable to the Director.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 28110 Ex. B; passed Dec. 4, 2012; Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.120 Unlawful acts.

It shall be unlawful for any Person to willfully prevent or attempt to prevent, by intimidation, threats, coercion, or otherwise, any Person from complying with the provisions of this chapter.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.130 Severability.

If any section of this chapter or its application to any Person or circumstance is held invalid by a court of competent jurisdiction, then the remaining sections of this chapter, or the application of the provisions to other Persons or circumstances, shall not be affected.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.140 Review of program.

This chapter shall be in effect through and until December 31, 2024, unless the City Council shall determine at an earlier date that the requirements of this chapter are no longer necessary. If this chapter has not been repealed by July 1, 2024, the City Council shall determine by the end of that year whether substantial effects or lack of opportunity of MWBEs and/or SBEs remain true in the relevant market and whether, and for how long, some or all of the requirements of this chapter should remain in effect.

(Ord. 28625 Ex. A; passed Nov. 5, 2019; Ord. 28274 Ex. A; passed Dec. 16, 2014; Ord. 28141 Ex. A; passed Mar. 26, 2013; Ord. 27867 Ex. A; passed Dec. 15, 2009)



City of Tacoma
Community & Economic Development
Office of Equity in Contracting
747 Market Street, Rm 900
Tacoma WA 98402
253-591-5075

EQUITY IN CONTRACTING UTILIZATION FORM

This form is to document **only** the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- Prime contractors are **required** to solicit bids from firms approved by the City of Tacoma Equity in Contracting Program as Certified Businesses.
- It is the prime contractor's responsibility to check the certification status of the firms intended to be utilized prior to the submittal deadline.

Bidder's Name: _____

Address: _____ City/State/Zip: _____

Spec. No. _____ Base Bid * \$ _____ Complete company names and phone numbers are required to verify your usage of qualifying firms.

a. Company Name and Certification Number(s)	b. MBE, WBE, or SBE (Write all that apply)	c. NAICS code(s)	d. Contractor Bid Amount (100%)	e. Material Supplier Bid Amount (20%)	f. Estimated MBE Usage Dollar Amount	g. Estimated WBE Usage Dollar Amount	h. Estimated SBE Usage Dollar Amount
i. MBE Utilization %	j. WBE Utilization %	k. SBE Utilization %					

By signing and submitting this form the bidder certifies that the EIC firms listed will be used on this project including all applicable change orders.

Type or Print Name of Responsible Officer / Title

Signature of Responsible Officer

Date

INSTRUCTIONS FOR COMPLETING EIC UTILIZATION FORM

The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.

This form when submitted with your bid provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. * Base Bid is the prime contractor's bid, plus any alternates, additives and deductive selected by the City. Also, please refer to Items #10-12 below.
2. Column "a" – List all EIC companies that you will be awarding a contract to if you are the successful bidder.
3. Column "b" – Identify if this firm is being utilized as an MBE, WBE, or SBE. (Firms may count towards multiple requirements)
4. Column "c" – List the appropriate NAICS code for the scope of work, services, or materials/supplies for each contractor.
5. Column "d" – The bid amount must be indicated for **all** listed **EIC** that you plan on doing business with. This quote is the price that you and the contractor have negotiated prior to bid opening.
6. Column "e" – The bid amount must be indicated for **all** listed **EIC** that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.
8. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
9. Column "g" – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
10. Column "h" – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, Multiply the amount in Column "d" by 1.0 plus the amount in Column "e" by 0.20. Insert the total amount in this column.
11. Block "i" – The percent of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column "f") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "f" divided by Base Bid (*) x 100 = EIC usage as a percent of the Base Bid.)
12. Block "j" – The percent of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column "g") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "g" divided by Base Bid (*) x 100 = EIC usage as a percent of the Base Bid.)

13. Block "k" – The percent of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column "h") by your Base Bid (*) then multiply by 100 to get a percentage: \$ amounts from column "h" divided by Base Bid (*) x 100 = EIC usage as a percent of the Base Bid.)

It is the prime contractor's responsibility to check the status of EIC contractors prior to bid opening. Call the EIC Office at 253- 591-5075 for additional information.

CITY OF TACOMA

Special Instructions

Equity in Contracting Instructions

As part of the City of Tacoma's ongoing work to address past disparities and to increase the City's contracting with and utilization of historically underutilized businesses, the Equity in Contracting (EIC) Program places requirements on City contracts for utilization of businesses certified by the Washington State Office of Minority and Women's Business Enterprise and approved by the Equity in Contracting Program ("Certified Businesses"). The EIC Program also provides guidance and technical assistance to Certified Businesses who are interested in providing supplies, services and public works to the City of Tacoma. The EIC Program requirements are contained in [Tacoma Municipal Code Chapter 1.07](#).

Bidders on City of Tacoma contracts are required to meet the stated EIC requirements. Bids will be evaluated on an individual basis to determine EIC compliance. **A bidder who fails to meet the stated EIC requirements will be considered non-responsible.** Bidders are also subject to the City's Equal Employment Opportunity policies prohibiting discrimination.

The stated EIC requirements may be met by the bidder or by identified subcontractors. All SBE goals may be met by using DBEs or SBEs from the OMWBE list. Contact the EIC Office at (253) 591-5075 if there are questions about this requirement.

It is the bidder's responsibility to ensure that their firm or identified subcontractors are certified by the State of Washington's Office of Minority and Women Business Enterprises and approved by the City of Tacoma EIC Program **at the time of bid submittal**. Business certification may be verified by contacting the EIC Office at 253-591-5075 between 8 AM and 4:30 PM, Monday through Friday.

A list of OMWBE certified firms for Pierce, King, Lewis, Mason and Grays Harbor counties, is available on the following web site address: www.omwbe.diversitycompliance.com.

The Equity in Contracting (EIC) forms included in these bid documents must be fully and accurately completed (including attachments) and included with bid submittals. Failure to include the required forms will result in the submittal being rejected as nonresponsive.

PART IV

CITY OF TACOMA

LOCAL EMPLOYMENT

AND

APPRENTICESHIP

TRAINING PROGRAM (LEAP)

REGULATIONS

FOR

PUBLIC WORKS CONTRACTS

Chapter 1.90

LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM

Sections:

- 1.90.010 Purpose.
- 1.90.020 Scope.
- 1.90.030 Definitions.
- 1.90.040 LEAP goals.
- 1.90.050 *Repealed.*
- 1.90.060 Effect of program on prime contractor/subcontractor relationship.
- 1.90.070 Apprentice utilization requirements – Bidding and contractual documents.
- 1.90.080 Enforcement.
- 1.90.090 Compliance with applicable law.
- 1.90.100 Review and reporting.
- 1.90.105 Authority
- 1.90.110 Interpretation.

1.90.010 Purpose.

The purpose of this Chapter is to establish a means of providing for the development of a trained and capable workforce possessing the skills necessary to fully participate in the construction trades.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.020 Scope.

The provisions of this Chapter shall apply to all Public Works or Improvements funded in whole or in part with City funds or funds which the City expends or administers in accordance with the terms of a grant.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.030 Definitions.

As used in this chapter, the following terms shall have the following meanings:

A. “Apprentice” shall mean a person enrolled in a course of training specific to a particular construction trade or craft, which training shall be approved by the Washington State Apprenticeship and Training Council established pursuant to RCW 49.04.010.

B. “Building Projects” shall mean all Public Works or Improvements having an Estimated Cost greater than \$750,000.00, and for which a building permit must be issued pursuant to Chapter 1 of the current edition of the state building code (Uniform Building Code).

C. “City” shall mean all divisions and departments of the City of Tacoma, and all affiliated agencies, provided, however, that the Tacoma Community Redevelopment Authority shall not be included within this definition.

D. “Civil Projects” shall mean all Public Works or Improvements that are not defined as a “Building Project,” provided that those projects having an Estimated Cost of less than \$250,000.00 shall not be included in this definition.

E. “Contractor or Service Provider” means a person, corporation, partnership, or joint venture entering into a contract with the City to construct a Public Work or Improvement.

F. “Director” shall mean the Director of Community and Economic Development, or the Director’s Designee.

G. “Economically Distressed ZIP Codes” shall mean ZIP codes in the Tacoma Public Utilities Service Area that meet two out of three (2/3) of the thresholds of:

1. High concentrations of residents living under 200% of the federal poverty line in terms of persons per acre (69th percentile)
2. High concentrations of unemployed people in terms of persons per acre (45th percentile)

3. High concentrations of people 25 years or older without a college degree in terms of persons per acre (75th percentile)

Said thresholds shall be updated within 30 days following any Prevailing Wage updates issued by the Washington State Labor and Industry. All updates are to be published on the first business day in August and in February of each calendar year.

H. "Electrical Utility" and "Water Utility" shall mean, respectively, the Light Division of the Department of Public Utilities of the City of Tacoma, and shall include the electrical and telecommunications services of that Division, and the Water Division of the Department of Public Utilities of the City of Tacoma.

I. "Estimated Cost" shall mean the anticipated cost of a Public Work or Improvement, as determined by the City, based upon the expected costs of materials, supplies, equipment, and labor, but excluding taxes and contingency funds.

J. "Estimated Labor Hours" shall mean the anticipated number of Labor Hours determined by the City to be necessary to construct a Public Work or Improvement and set forth in the specifications for the project, or as may be subsequently revised due to contract or project adjustment, or pursuant to an agreed upon change order.

K. "Existing Employee" shall mean an employee whom the Contractor or Service Provider can demonstrate was actively employed by the Contractor or Service Provider for at least 1000 hours in the calendar year prior to bid opening plus one month following bid opening, and who was performing work in the construction trades.

L. "Labor Hours" shall mean the actual number of hours worked by workers receiving an hourly wage who are employed on the site of a Public Work or Improvement, and who are subject to state or federal prevailing wage requirements. The term "Labor Hours" shall include hours performed by workers employed by the Contractor or Service Provider and all Subcontractors, and shall include additional hours worked as a result of a contract or project adjustment or pursuant to an agreed upon change order. The term "Labor Hours" shall not include hours worked by workers who are not subject to the prevailing wage requirements set forth in either RCW 39.12 or the Davis-Bacon Act - 40 U.S.C. 276 (a).

M. "LEAP Coordinator" shall mean the City of Tacoma staff member who administers LEAP.

N. "LEAP Program" or "Program" shall mean the City of Tacoma's Local Employment and Apprenticeship Training Program, as described in this chapter.

O. "LEAP Regulations" or "Regulations" shall mean the rules and practices established in this document.

P. "LEAP Utilization Plan" shall mean the document submitted by the Contractor to the LEAP Coordinator which outlines how the associated goals will be met on the project.

Q. "Priority Hire Resident" shall mean any resident within the Economically Distressed ZIP Codes.

R. "Project Engineer" shall mean the City employee who directly supervises the engineering or administration of a particular construction project subject to this chapter.

S. "Public Work or Improvement" shall have the same meaning as provided in Section 39.04.010 RCW, as that Section may now exist or hereafter be amended.

T. "Resident of Tacoma" shall mean any person, not defined as a Resident of the Economically Distressed ZIP Codes within the Tacoma Public Utilities Service Area, who continues to occupy a dwelling within the boundaries of the City of Tacoma, has a present intent to continue residency within the boundaries of the City, and who demonstrates the genuineness of that intent by producing evidence that the person's presence is more than merely transitory in nature.

U. "Service Area - Electrical" or "Electrical Service Area" shall mean that area served with retail sales by the Electrical Utility of the City of Tacoma at the time a bid is published by the Electrical Utility for a Public Work or Improvement to be performed primarily for the Electrical Utility.

V. "Service Area - Water" or "Water Service Area" shall mean that area served with retail sales by the Water Utility of the City of Tacoma at the time a bid is published by the water utility for a Public Work or Improvement to be performed primarily for the Water Utility.

W. "Service Contract" shall mean all City contracts relating to a Public Work or Improvement which utilize labor at a City site and which are not within the exceptions to nor defined as "Building Projects" or "Civil Projects."

X. "Subcontractor" means a person, corporation, partnership, or joint venture that has contracted with the Contractor or Service Provider to perform all or part of the work to construct a Public Work or Improvement by a Contractor.

Y. "Tacoma Public Utilities Service Area" shall mean every ZIP code listed by Tacoma Public Utilities as an area that either receives services or maintains infrastructure to provide services.

Z. Washington State Labor and Industry Prevailing Wage shall mean the hourly wage, usual benefits and overtime, paid in the largest city in each county, to the majority of workers, laborers, and mechanics. Prevailing wages are established, by the Department of Labor & Industries, for each trade and occupation employed in the performance of public work. They are established separately for each county, and are reflective of local wage conditions.

AA. "Tacoma Public Utilities" means the City of Tacoma, Department of Public Utilities.

(Ord. 28147 Ex. B; passed May 7, 2013; Ord. 28110 Ex. C; passed Dec. 4, 2012; Ord. 27815 Ex. A; passed Jun. 30, 2009; Ord. 27368 § 1; passed Jun. 21, 2005; Ord. 26698 § 1; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.040 LEAP goals.

A. Utilization Goals.

1. All Contractors constructing Civil Projects or Building Projects, and all Service Providers involved with the construction of a Public Work or Improvement, shall ensure that at least 15 percent of the total Labor Hours actually worked on the Project are performed by persons having their residence within the boundaries of the City of Tacoma or Economically Distressed ZIP Codes, whether or not any such person is an Apprentice.

a. The thresholds for this section shall be \$250,000.00 for Civil Projects and \$750,000.00 for Building Projects.

2. Fifteen percent (15%) of the Total Labor Hours on contracts above one-million dollars (\$1,000,000.00) shall have work performed by Apprentices who are residents of the Tacoma Public Utilities Service Area consistent with RCW 39.04.320(1)(a), subject to waiver based on exceptions as specified in RCW 39.04.320(2)(a), (b), and (c).

3. Labor Hours performed by non-residents of the State of Washington will be deducted from a project's total Labor Hours for purposes of determining compliance with the requirements of this chapter.

4. All Contractors and Service Providers shall submit a LEAP Utilization Plan as provided for in the regulations adopted under this chapter, and shall meet with the LEAP Coordinator to review said Plan prior to being issued a Notice to Proceed. Failure to submit a LEAP Utilization Plan may be grounds for the City to withhold remittance of a progress payment until such Plan is received from the responsible Contractor or Provider. A meeting with the LEAP Coordinator prior to issuance of a Notice to Proceed shall be excused only when the LEAP Coordinator is unavailable to meet prior to the scheduled date for issuance of the Notice to Proceed and the Contractor and the LEAP Coordinator have otherwise scheduled a meeting for the coordinator to review the Contractor's or Provider's plan.

The Contractor or Service Provider shall be responsible for meeting the LEAP utilization goal requirements of the contract, including all amendments and change orders thereto, and shall be responsible for overall compliance for all hours worked by Subcontractors. To the extent possible, the Contractor or Service Provider shall recruit Apprentices from multiple trades or crafts.

B. Failure to Meet Utilization Goal.

1. Contracts for the construction of Building projects or Civil Projects and Service Contracts shall provide that Contractors or Service Providers failing to meet the LEAP utilization goals shall be assessed an amount for each hour that is not achieved. The amount per hour shall be based on the extent the Contractor or Service Provider met its goal. The amount per hour that shall be assessed shall be as follows:

Percent of Goal Met	Assessment per unmet hour
100%	\$ 0.00
90% - 99%	\$ 2.00
75% to 89%	\$ 3.50
50% to 74%	\$ 5.00
1% to 49%	\$ 7.50
0%	\$10.00

When determining the percent of goal that is met, all rounding shall be down to the nearest whole percent. No penalty shall be waived by the City unless it is determined by the Director to be in the best interests of the City, which determination shall be made after consultation with the LEAP Coordinator.

2. Deposit of Assessments. All assessments imposed pursuant to this section shall be deposited into a separate account and utilized to support the City's pre-apprenticeship and training program. The policies and regulations adopted by the City Manager and Director of Utilities pursuant to this chapter shall address issues pertaining to a Contractor's existing workforce. Contributions need not be made for Labor Hours that have been adjusted in accordance with Section 1.90.040(E).

C. LEAP Reports. Notwithstanding the provisions of TMC 1.90.100, the Director shall, not less than annually, publish a LEAP report setting forth Contractor compliance with this chapter. Said report shall include information on all contracts and all Contractors to which this chapter applies, and shall detail the level and nature of LEAP participation by contract and by Contractor. The Director's LEAP report may include such other information as may be helpful to assuring fair and accurate representation of the contracts, Contractors or projects covered in the report. The Director's LEAP reports may be considered by the Board of Contracts and Awards in its determinations as to bidder responsibility.

D. LEAP Goal Adjustments.

1. LEAP utilization goals may be adjusted prior to bid opening and/or as a result of a contract amendment or change order on a Building Project, Civil Project, or Service Contract.

a. If LEAP utilization goals are adjusted prior to bid opening, they shall be set forth in the bid or Request For Proposal advertisement and specification documents or in an addendum timely provided to prospective bidders, provided that such adjustment shall be based upon a finding by the Project Engineer that the reasonable and necessary requirements of the contract render LEAP utilization unfeasible at the required levels. The Director shall concur with the Project Engineer's finding, provided that should the Project Engineer and the Director fail to reach agreement on the Project Engineer's finding, then in that circumstance the matter shall be referred to the City Manager or the Director of Utilities, as appropriate, for ultimate resolution. Notwithstanding any other provision of this chapter to the contrary, the decision of the City Manager or the Director of Utilities with regard to LEAP goal adjustment may not be appealed.

b. If LEAP utilization goals are adjusted due to contract amendment or change order, the amount of adjustment shall be consistent with the utilization goals set forth in this chapter and shall be determined pursuant to regulations adopted pursuant to this chapter for administration of LEAP utilization goal adjustments.

2. The methodology of determining the appropriate adjustments to LEAP utilization goals shall be determined in consultation with the LEAP Advisory Committee, established pursuant to this ordinance for so long as the LEAP Advisory Committee remains in existence.

3. LEAP utilization goals shall not apply to those portions of a project that are funded by sources other than (a) City funds, or (b) funds which the City expends or administers in accordance with the terms of a grant to the City, provided that the Project Engineer shall notify the Director of such non-application prior to bid advertisement. For the purposes of this paragraph, credits extended by another entity for the purpose of providing project funding shall not be considered to be City funds.

E. Utilization - Electrical Projects Outside Electrical Service Area. Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City's Electrical Utility, which are wholly situated outside the

Electrical Service Area, and for which the estimated cost is less than \$1,000,000.00, are exempt from the requirements of this chapter.

F. Utilization - Water Projects Outside Water Service Area. Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City's Water Utility, which are wholly situated outside the Water Service Area, and for which the estimated cost is less than \$1,000,000.00 are exempt from the requirements of this chapter.

G. Utilization –Projects Outside Tacoma Public Utilities Service Area. Civil Projects or Building Projects that are constructed primarily for the benefit or use by Tacoma Public Utilities, which are wholly situated outside the retail service area of the Tacoma Public Utilities Service Area, and for which the estimated cost is less than \$1,000,000.00 are exempt from the requirements of this chapter. Projects wholly situated outside the Tacoma Public Utilities Service Area, and for which the estimated cost is more than \$1,000,000.00, shall be exempt from 15% utilization goal specified in subsection A1. of this section. The 15% utilization goal specified in subsection A2. of this section may be met if project work is performed by Apprentices who are enrolled in a course of training specific to a particular construction trade or craft, provided such training has been approved by the Washington State Apprenticeship and Training Council in accordance with Chapter 49.04, RCW.

H. Emergency. This chapter shall not apply in the event of an Emergency. For the purposes of this section, an "Emergency" means unforeseen circumstances beyond the control of the City that either: (a) present a real, immediate threat to the proper performance of essential functions; or (b) will likely result in material loss or damage to property, bodily injury, or loss of life if immediate action is not taken.

I. Conflict with State or Federal Requirements. If any part of this chapter is found to be in conflict with federal or state requirements which are a prescribed condition to the allocation of federal or state funds to the City, then the conflicting part of this chapter is inoperative solely to the extent of the conflict and with respect to the City departments directly affected. This provision does not affect the operation of the remainder of this chapter. Administrative rules or regulations adopted under this chapter shall meet federal and state requirements which are a necessary condition to the receipt of federal or state funds by the City.

(Ord. 28147 Ex. B; passed May 7, 2013: Ord. 27815 Ex. A; passed Jun. 30, 2009: Ord. 27368 § 2; passed Jun. 21, 2005: Ord. 26992 § 1; passed Oct. 15, 2002: Ord. 26698 § 2; passed Sept. 12, 2000: Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.050 Good faith efforts. *Repealed by Ord. 27368.*

(Ord. 27368 § 3; passed Jun. 21, 2005: Ord. 26698 § 3; passed Sept. 12, 2000: Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.060 Effect of program on prime contractor/service provider - subcontractor relationship.

The LEAP Program shall not be construed so as to modify or interfere with any relationship between any Contractor or Service Provider and Subcontractor. The LEAP Program shall not grant the City any authority to control the manner or method of accomplishing any construction work that is additional to any authority retained by the City in a Public Works or Improvement contract.

(Ord. 26698 § 4; passed Sept. 12, 2000: Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.070 Apprentice utilization requirements – Bidding and contractual documents.

All packages of bid documents for every Building Project and every Civil Project shall incorporate provisions satisfactory to the City Attorney so as to allow enforcement of the provisions contained in this Chapter. Such contractual provisions may include liquidated damages, calculated to reimburse the City for the Contractor's breach of these performance requirements, which shall be published with the City's call for bids.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.080 Enforcement.

A. The Director shall review the Contractor's or Service Provider's and all Subcontractor's employment practices during the performance of the work for compliance with LEAP Program requirements. On-site visits may be conducted as necessary to verify compliance with the requirements of the LEAP Program. The Contractor, Service Provider, or Subcontractors shall not deny to the City the right to interview its employees, provided that the Director shall make reasonable efforts to coordinate employee interviews with employers.

B. Any knowing failure or refusal to cooperate in compliance monitoring may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

C. The making of any material misrepresentation may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

D. Any action by the City, its officers and employees, under the provisions of this Chapter may be reviewed by the Board of Contracts and Awards, upon written application of the party so affected. Application shall be made within twenty (20) days of the date of the action upon which the appeal is based, and provided to the City by certified mail or by personal service. Any action taken by the Board of Contracts and Awards may be appealed to the City Council or Public Utility Board, as appropriate, and thereafter if desired, to the Superior Court of Pierce County, Washington, within fifteen (15) days of the previous decision.

(Ord. 26698 § 5; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.090 Compliance with applicable law.

Nothing in this Chapter shall excuse a Prime Contractor, Service Provider, or Subcontractor from complying with all relevant federal, state, and local laws.

(Ord. 26698 § 6; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.100 Review and reporting.

The City Manager and Director of Utilities shall review the Program on or before January 1, 2000, and every two (2) years thereafter, and shall report to the City Council and Public Utility Board the Manager's and Director's findings, conclusions, and recommendations as to the continued need for the Program, and any revisions thereto that should be considered by the Council and Board.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.105 Authority.

The City Manager and the Director of Utilities shall have authority to jointly adopt policies and regulations consistent with this chapter to implement the LEAP program.

(Ord. 26698 § 7; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.110 Interpretation.

This Chapter shall not be interpreted or construed so as to conflict with any state or federal law, nor shall this Chapter be enforced such that enforcement results in the violation of any applicable judicial order.

(Ord. 26301 § 1; passed Oct. 6, 1998)



City of Tacoma
LEAP Office
747 Market Street, Room 900
Tacoma, WA 98402
Phone (253) 591-5826
FAX (253) 591-5232

LEAP

Document Submittal Schedule

In the attached packet, you will find the LEAP forms that are required to be submitted by the Prime and Sub Contractors.

- ❑ **LEAP Instructions and Goal Form:** brief overview of LEAP Program requirements
- ❑ **Prime Contractor *LEAP* Utilization Plan:** to be submitted at or by the Pre-Construction Meeting
(Required by Prime Contractor Only)
- ❑ **LEAP Apprentice Verification Form:** to be submitted on an ongoing basis for each qualified Apprentice employee via LCP Tracker
- ❑ **Tacoma Public Utilities Service Area List, Economically Distressed ZIP Codes List:** for your reference on LEAP-qualified zoning areas

In addition, the LEAP Office will also require from the Prime Contractor and all its Subcontractors:

- ❑ **Weekly Certified Payrolls:** to be submitted weekly, biweekly or monthly via LCP Tracker
- ❑ **Document Verification:** provide required information when requested from LEAP Office

Please submit above documents as instructed by the Project Manager.

If you have any questions or request further information, please feel free to contact the City of Tacoma's LEAP Program at (253) 591-5826, Fax (253) 591-5232, or email carlstrong@cityoftacoma.org.

LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP) INSTRUCTIONS AND GOAL FORM

LEAP REQUIREMENTS & PROCEDURES:

The LEAP office enforces post-award mandatory requirements. Bidders do not have to submit any information in the bid submittal package to be in compliance with LEAP.

Post-award Submittals:

- Prime Contractor LEAP Utilization Plan - This form is to be completed and presented at the Pre-Construction Meeting.
- LEAP Apprentice Verification Form - This form is to be completed for every qualifying Apprentice employee.

The forms above, LEAP Program Requirements, and all related LEAP documents can be accessed on the City of Tacoma LEAP website by navigating to LEAP Forms at the following link:

<http://cityoftacoma.org/leap>.

The City of Tacoma's LEAP office enforces two mandatory goals on City projects above certain monetary thresholds.

The Local Employment Utilization Goal requires the Prime Contractor performing a qualifying public works project to ensure that 15 percent of the total labor hours worked on the project are performed by residents of the City of Tacoma or Economically Distressed Areas of the Tacoma Public Utilities Service Area.

The Apprentice Utilization Goal requires the Prime Contractor performing a qualifying public works project to ensure that 15 percent of the total labor hours worked on the project are performed by Apprentices who are residents of the City of Tacoma or Tacoma Public Utilities Service Area. The accompanying LEAP Regulations, forms, and maps are included in these specifications.

*Exceptions: If the project is located outside of the retail service area of the Tacoma Public Utilities Service Area, then Apprentices may come from the county in which the work is performed.

This project is above \$1 million and is thusly subject to the:

1. 15% Local Employment Utilization Goal
2. 15% Apprentice Utilization Goal

LEAP staff can assist contractors in the recruitment, screening and selection of qualified City of Tacoma residents, Economically Distressed Area residents, and Apprentices. Contractors may obtain further information by contacting the City's LEAP Office at (253) 591-5826. The LEAP Office is located in the Tacoma Municipal Building, 747 Market Street, Room 808, Tacoma, WA 98402.



City of Tacoma
LEAP Office
747 Market Street, Room 900
Tacoma WA 98402
Telephone (253) 591-5826
Fax (253) 591-5232

PRIME CONTRACTOR LEAP UTILIZATION PLAN

Failure to submit this plan at the Pre-Construction Meeting may result in Progress Payments being withheld.

Part A

Contractor:		Date:
Specification Number:	Contract/Work Order Number(s):	Contract Dollar Amount:
Project Description:		Notes:

PART B PLANNED LEAP HOURS*

Trade or Craft	City of Tacoma Resident	Economic Distressed Area Resident	Tacoma Public Utilities Service Area Apprentice Resident	WA State Apprentice *(Contracts outside of TPU Service Area Only)	
	hrs.	hrs.	hrs.	hrs.	
	hrs.	hrs.	hrs.	hrs.	Date
	hrs.	hrs.	hrs.	hrs.	
	hrs.	hrs.	hrs.	hrs.	
	hrs.	hrs.	hrs.	hrs.	
	hrs.	hrs.	hrs.	hrs.	Rejected
	hrs.	hrs.	hrs.	hrs.	
	hrs.	hrs.	hrs.	hrs.	Date
	hrs.	hrs.	hrs.	hrs.	
Totals					
					TOTAL hrs.

Part C

Provide a description of how the Contractor plans to ensure that the LEAP Utilization Goals on the project will be met. (Use additional sheets if necessary)

General Instructions for completing Prime Contractor LEAP Utilization Plan

Part A

Contractor/Contract Information Section: The Prime Contractor is responsible for completing this section. Failure to submit this plan at the Pre-Construction Meeting may result in Progress Payments being withheld.

Part B

Planned LEAP Hours Section: This section should be completed by the Prime Contractor. The information required in Part B is described below.

Trade or Craft: Indicate the Trade or Craft being used.

LEAP Employee Categories: Indicate the number of hours that will be utilized by the Prime Contractor and all Sub Contractors for each craft and broken down by City of Tacoma Resident, Economically Distressed Area Resident, Tacoma Public Utilities Service Area Apprentice Resident, WA State Apprentice *(Contracts outside of TPU Service Area Only).

Totals: Total the number of hours in each of the five (5) columns.

Part C

Description of how the Contractor plans to ensure fulfillment of the LEAP Utilization Goal: This section is to be completed by the Prime Contractor. Please describe how you plan to satisfy the LEAP Utilization Goal on this project. Provide a summary of your outreach and recruitment procedures to hire LEAP Qualified Employees to work on this project.



City of Tacoma LEAP Office
747 Market Street, Room 808
Tacoma, WA 98402
(253) 591-5826 fax (253) 591-5232
www.cityoftacoma.org/leap

LEAP APPRENTICE VERIFICATION FORM

Contractor/Sub: _____ Specification Number: _____

Project Description: _____

Employee Name: _____ Craft: _____

Ethnic Group (*optional*): ☐ Asian/Pac Isl. ☐ Black ☐ Hispanic ☐ Native American ☐ White ☐ Other

Gender (*optional*): ☐ MALE ☐ FEMALE

Complete Physical Address (No PO Boxes): _____

City: _____ State: _____ Zip: _____ Telephone: _____ Date of Hire: _____

Apprenticeship County: _____ Apprentice Registration I.D. (*if applicable*): _____

Age: _____ Copy of DD-214: _____

*******Please fill out entire form for tracking LEAP performance*******

LEAP qualified Apprentice categories: (check all that apply and provide evidence for each check)

_____ a. WA State Approved Apprentice living in Tacoma Public Utilities Service Area

_____ b. WA State Approved Apprentice *(Only valid for contracts where 100% of work is performed outside of Pierce County)

Signature of Employee: _____ Date: _____

Contractor Representative: _____ Date: _____

LEAP APPRENTICE VERIFICATION FORM

To be Completed by Contractor or Subcontractor

Please attach a legible copy of the following document(s) showing the address of residence as proof of local (Tacoma) and/or Pierce County residency and apprentice status, youth status, or veteran status.

.....

_____ For Youth - Copy of Birth Certificate or WA State ID or
_____ WA Driver's License (projects advertised after 05-20-13)

_____ For Veterans – Copy of DD-214(Projects advertised after
_____ 05-20-13)

_____ Driver's License with current address

_____ Utility Bill/Phone Bill/Cell Bill/Cable Bill with current
_____ address

_____ Copy of current tax form W-4

_____ Rental Agreement/Lease (residential)

_____ Computer Printout From Other Government Agencies

_____ Property Tax Records

_____ Apprentice Registration I.D.

_____ Food Stamp Award Letter

_____ Housing Authority Verification

_____ Insurance Policy (Residence/Auto)

*Any of the above must have a complete physical address verified by the www.govme.org website.

No PO Boxes

Contractor Representative:_____

Date:_____

Title:_____

No Work Performed (NWP) Report

Prime/Sub Contractor: _____

Specification Number: _____

Project Description: _____

Payroll Week Ending Date: _____ Payroll Number: _____

NO WORK PERFORMED

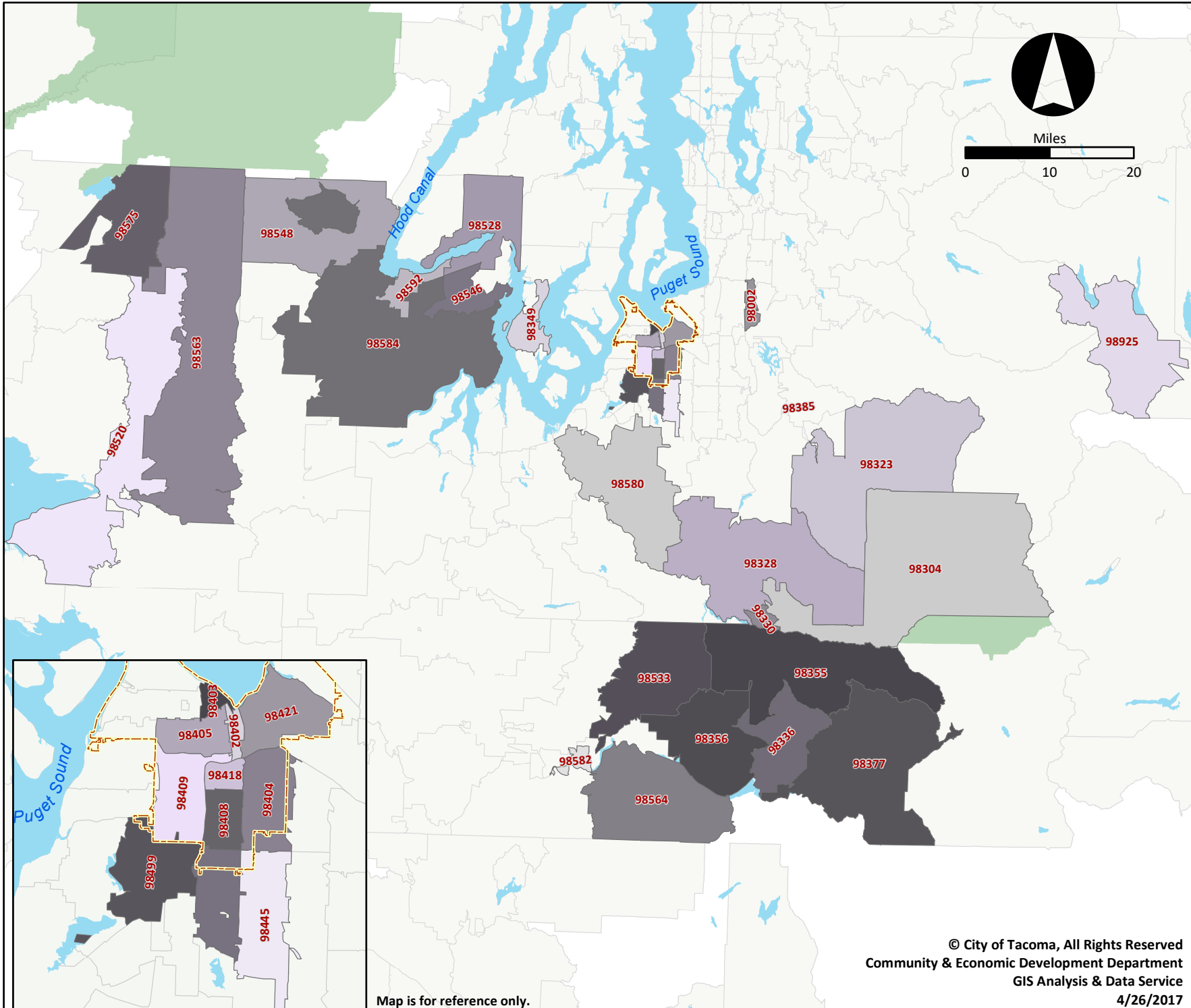
I, the undersigned, do hereby certify under penalty of perjury, that the information contained herein is true and correct.

Signature of Responsible Officer

Title

Date

Appendix C: Economically Distressed ZIP Codes Map



City Limits

- 98002
- 98304
- 98323
- 98328
- 98330
- 98336
- 98349
- 98355
- 98356
- 98377
- 98385
- 98520
- 98528
- 98533
- 98546
- 98548
- 98563
- 98564
- 98575
- 98580
- 98582
- 98584
- 98592
- 98925
- 98402
- 98403
- 98404
- 98408
- 98409
- 98418
- 98421
- 98444
- 98445
- 98499

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Community & Economic Development Department
GIS Analysis & Data Service
4/26/2017

Map is for reference only.

Economically Distressed ZIP Codes

Zip Code	200% Pov	Unemployed	25+ College	Area
98002		Y	Y	Auburn
98030	Y	Y		Kent
98032	Y	Y		Kent
98198	Y	Y		Seattle
98304	Y	Y	Y	Ashford
98323		Y	Y	Carbonado
98330	Y		Y	Elbe
98336	Y		Y	Glenoma
98355	Y	Y	Y	Mineral
98356	Y	Y	Y	Morton
98377		Y	Y	Randle
98385		Y	Y	South Prairie
98424	Y	Y		Fife
98433		Y	Y	JBLM
98439	Y	Y		Lakewood
98444	Y	Y	Y	Parkland
98467	Y	Y		University Place
98499	Y	Y		Lakewood
98520	Y	Y		Aberdeen
98528	Y		Y	Belfair
98548	Y	Y	Y	Hoodsport
98564	Y		Y	Mosssyrock
98575		Y	Y	Quinault
98580		Y	Y	Roy
98584	Y	Y		Shelton
98597	Y	Y		Yelm
98925	Y	Y	Y	Easton

“200% Pov” = People at or below 200% of the federal poverty line. (69th percentile)

“Unemployed” = Unemployment rate (45th percentile)

“25+ College” = People at or above 25 years old without a college degree. (75th percentile)

Tacoma Public Utility Service Area

98001	Auburn
98002	Auburn
98003	Federal Way
98010	Black Diamond
98022	Enumclaw
98023	Federal Way
98030	Kent
98032	Kent
98038	Maple Valley
98042	Kent
98045	North Bend
98051	Ravensdale
98070	Vashon
98092	Auburn
98198	Seattle
98304	Ashford
98321	Buckley
98323	Carbonado
98327	DuPont
98328	Eatonville
98329	Gig Harbor
98330	Elbe
98332	Gig Harbor
98333	Fox Island
98335	Gig Harbor
98336	Glenoma
98338	Graham
98349	Lakebay
98354	Milton
98355	Mineral

98356	Morton
98360	Orting
98371	Puyallup
98372	Puyallup
98373	Puyallup
98374	Puyallup
98375	Puyallup
98377	Randle
98385	South Prairie
98387	Spanaway
98388	Spanaway
98390	Sumner
98391	Bonney
98402	Tacoma
98403	Tacoma
98404	Tacoma
98405	Tacoma
98406	Tacoma
98407	Tacoma
98408	Tacoma
98409	Tacoma
98416	UPS
98418	Tacoma
98421	Tacoma
98422	Tacoma
98424	Tacoma
98430	Camp Murray
98433	Tacoma
98438	McChord
98439	Lakewood

98443	Tacoma
98444	Tacoma
98445	Tacoma
98446	Tacoma
98447	PLU
98465	Tacoma
98466	Tacoma
98467	University Place
98498	Lakewood
98499	Lakewood
98520	Aberdeen
98524	Allyn
98528	Belfair
98533	Cinebar
98546	Grapeview
98548	Hoodspport
98555	Lilliwaup
98563	Montesano
98564	Mossyrock
98575	Quinault
98580	Roy
98582	Salkum
98584	Shelton
98585	Silver Creek
98591	Toledo
98592	Union
98597	Yelm
98925	Easton

Apprentices may come from **any** of the ZIP codes listed under this page. If an apprentice lives in a Economically Distressed ZIP code, they may count towards those labor hours as well. Journeyman must be from the Economically Distressed ZIP codes.

P A R T V

STATE PREVAILING WAGE RATES

PREVAILING WAGE RATES

This project requires prevailing wages under [39.12 RCW](#). Any worker, laborer, or mechanic employed in the performance of any part of the work shall be paid not less than the applicable prevailing rate of wage.

The project site is located in Pierce County.

The effective date for prevailing wages on this project will be the **submittal deadline** with these exceptions:

- a. If the project is not awarded within six months of the submittal deadline, the award date is the effective date.
- b. If the project is not awarded pursuant to a competitive solicitation, the date the contract is executed is the effective date.
- c. Janitorial contracts follow WAC 296-127-023.

Except for janitorial contracts, these rates shall apply for the duration of the contract unless otherwise noted in the solicitation.

Look up prevailing rates of pay, benefits, and overtime codes from this link:

<https://secure.lni.wa.gov/wagelookup/>

REQUIRED FILINGS

The contractor and all subcontractors covered under [39.12 RCW](#) shall submit to the Department of Labor and Industries (L&I) for work provided under this contract:

1. A Statement of Intent to Pay Prevailing Wages must be filed with and approved by L&I upon award of contract.
2. An Affidavit of Wages Paid must be filed with and approved by L&I upon job completion.

Payments cannot be released by the City until verification of these filings are received by the engineer. Additional information regarding these filings can be obtained by calling the Department of Labor & Industries, Prevailing Wage at 360-902-5335, <https://www.lni.wa.gov/> or by visiting their MY L&I account.

P A R T V I

CITY OF TACOMA

INSURANCE REQUIREMENTS



CITY OF TACOMA

INSURANCE REQUIREMENTS FOR CONTRACTS

The Contractor (Contractor) shall maintain at least the minimum insurance set forth below. By requiring such minimum insurance, the City of Tacoma shall not be deemed or construed to have assessed the risk that may be applicable to Contractor under this Contract. Contractor shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.

1. GENERAL REQUIREMENTS

The following General Requirements apply to Contractor and to Subcontractor(s) of every tier performing services and/or activities pursuant to the terms of this Contract. Contractor acknowledges and agrees to the following insurance requirements applicable to Contractor and Contractor's Subcontractor(s):

- 1.1. City of Tacoma reserves the right to approve or reject the insurance provided based upon the insurer, terms and coverage, the Certificate of Insurance, and/or endorsements.
- 1.2. Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by City of Tacoma.
- 1.3. Contractor shall keep this insurance in force during the entire term of the Contract and for Thirty (30) calendar days after completion of all work required by the Contract, unless otherwise provided herein.
- 1.4. Insurance policies required under this Contract that name "City of Tacoma" as Additional Insured shall:
 - 1.4.1. Be considered primary and non-contributory for all claims.
 - 1.4.2. Contain a "Separation of Insured provision and a "Waiver of Subrogation" clause in favor of City of Tacoma.
- 1.5. Section 1.4 above does not apply to contracts for purchasing supplies only.
- 1.6. Verification of coverage shall include:
 - 1.6.1. An ACORD certificate or equivalent.
 - 1.6.2. Copies of all endorsements naming the City of Tacoma as additional insured and showing the policy number.
 - 1.6.3. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.
- 1.7. Liability insurance policies, with the exception of Professional Liability and Workers' Compensation, shall name the City of Tacoma and its officers, elected officials, employees, agents, and authorized volunteers as additional insured.
 - 1.7.1. No specific person or department should be identified as the additional insured.
 - 1.7.2. All references on certificates of insurance and endorsements shall be listed as "City of Tacoma".
 - 1.7.3. The City of Tacoma shall be additional insured for both ongoing and completed operations using Insurance Services Office (ISO) form CG 20 10 04 13 and CG 20



CITY OF TACOMA

INSURANCE REQUIREMENTS FOR CONTRACTS

37 04 13 or the equivalent for the full available limits of liability maintained by the Contractor irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract and irrespective of whether the Certificate of Insurance describes limits lower than those maintained by the Contractor.

- 1.8. Contractor shall provide a Certificate of Insurance for each policy of insurance meeting the requirements set forth herein when Contractor provides the signed Contract for the work to City of Tacoma. Contractor shall provide copies of any applicable Additional Insured, Waiver of Subrogation, and Primary and Non-contributory endorsements. Contract or Permit number and the City Department must be shown on the Certificate of Insurance.
- 1.9. Insurance limits shown below may be written with an excess policy that follows the form of an underlying primary liability policy or an excess policy providing the required limit.
- 1.10. Liability insurance policies shall be written on an "occurrence" form, except for Professional Liability/Errors and Omissions, Pollution Liability, and Cyber/Privacy and Security
- 1.11. If coverage is approved and purchased on a "Claims-Made" basis, Contractor warrants continuation of coverage, either through policy renewals or by the purchase of an extended reporting period endorsement as set forth below.
- 1.12. The insurance must be written by companies licensed or authorized in the State of Washington pursuant to RCW 48 with an (A-) VII or higher in the A.M. Best's Key Rating Guide www.ambest.com.
- 1.13. Contractor shall provide City of Tacoma notice of any cancellation or non-renewal of this required insurance within Thirty (30) calendar days.
- 1.14. Contractor shall not allow any insurance to be cancelled or lapse during any term of this Contract, otherwise it shall constitute a material breach of the Contract, upon which City of Tacoma may, after giving Five (5) business day notice to Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith; with any sums so expended to be repaid to City of Tacoma by Contractor upon demand, or at the sole discretion of City of Tacoma, offset against funds due Contractor from City of Tacoma.
- 1.15. Contractor shall be responsible for the payment of all premiums, deductibles and self-insured retentions, and shall indemnify and hold the City of Tacoma harmless to the extent such a deductible or self-insured retained limit may apply to the City of Tacoma as an additional insured. Any deductible or self-insured retained limits in excess of Twenty Five Thousand Dollars (\$25,000) must be disclosed and approved by City of Tacoma Risk Manager and shown on the Certificate of Insurance.
- 1.16. City of Tacoma reserves the right to review insurance requirements during any term of the Contract and to require that Contractor make reasonable adjustments when the scope of services has changed.



CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

- 1.17. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made by City of Tacoma to Contractor.
- 1.18. Insurance coverages specified in this Contract are not intended and will not be interpreted to limit the responsibility or liability of Contractor or Subcontractor(s).
- 1.19. Failure by City of Tacoma to identify a deficiency in the insurance documentation provided by Contractor or failure of City of Tacoma to demand verification of coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- 1.20. If Contractor is a State of Washington or local government and is self-insured for any of the above insurance requirements, a certification of self-insurance shall be attached hereto and be incorporated by reference and shall constitute compliance with this Section.

2. CONTRACTOR

As used herein, "Contractor" shall be the Supplier(s) entering a Contract with City of Tacoma, whether designated as a Supplier, Contractor, Vendor, Proposer, Bidder, Respondent, Seller, Merchant, Service Provider, or otherwise.

3. SUBCONTRACTORS

It is Contractor's responsibility to ensure that each subcontractor obtain and maintain adequate liability insurance coverage. Contractor shall provide evidence of such insurance upon City of Tacoma's request.

4. REQUIRED INSURANCE AND LIMITS

The insurance policies shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve Contractor from liability in excess of such limits.

4.1 Commercial General Liability Insurance

Contractor shall maintain Commercial General Liability Insurance policy with limits not less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) annual aggregate. The Commercial General Liability Insurance policy shall be written on an Insurance Services Office form CG 00 01 04 13 or its equivalent. Products and Completed Operations shall be maintained for a period of three years following Substantial Completion of the Work related to performing construction services.

This policy shall include product liability especially when a Contract solely is for purchasing supplies. The Commercial General Liability policy shall be endorsed to include:

- 4.1.1 A per project aggregate policy limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

4.2 Commercial (Business) Automobile Liability

Contractor shall maintain Commercial Automobile Liability policy with limits not less than One Million Dollars (\$1,000,000) each accident for bodily injury and property damage and bodily injury



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and property damage coverage for owned (if any), non-owned, hired, or leased vehicles. Commercial Automobile Liability Insurance shall be written using ISO form CA 00 01 or equivalent. Contractor must also maintain an MCS 90 endorsement or equivalent and a CA 99 48 endorsement or equivalent if "Pollutants" are to be transported.

4.3 Workers' Compensation

4.3.1 Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington, as well as any other similar coverage required for this work by applicable federal laws of other states. The Contractor must comply with their domicile State Industrial Insurance laws if it is outside the State of Washington.

4.4 Employers' Liability Insurance

Contractor shall maintain Employers' Liability coverage with limits not less than One Million Dollars (\$1,000,000) each employee, One Million Dollars (\$1,000,000) each accident, and One Million Dollars (\$1,000,000) policy limit.

4.5 Professional Liability Insurance or Errors and Omissions

Contractor and/or its subcontractor shall maintain Professional Liability or Errors and Omissions with limits of One Million Dollars (\$1,000,000) per claim and Two Million Dollars (\$2,000,000) in the aggregate covering acts, errors and omissions arising out of the professional services under this Contract.

If the policy limit includes the payment of claims or defense costs, from the policy limit, the per claim limit shall be Two Million Dollars (\$2,000,000).

If the scope of such design-related professional services includes work related to pollution conditions, the Professional Liability policy shall include Pollution Liability coverage.

If provided on a "claims-made" basis, such coverage shall be maintained by policy renewals or an extended reporting period endorsement for not less than three years following the end of the Contract.

4.6 Excess or Umbrella Liability Insurance

Contractor shall provide Excess or Umbrella Liability Insurance with limits not less than Five Million Dollars (\$5,000,000) per occurrence and in the aggregate. This coverage shall apply, at a minimum, in excess of primary underlying Commercial General Liability, Employer's Liability, Pollution Liability, Marine General Liability, Protection and Indemnity, and Automobile Liability if required herein.

4.7 Pollution Liability Insurance

Contractor shall maintain a Pollution Liability or Environmental Liability Insurance providing coverage, including investigation and defense costs, for bodily injury and property damage, including loss of use of damaged property or of property that has been physically damaged or destroyed.

Such coverage shall provide both on-site and off-site cleanup costs and cover gradual and sudden pollution, and include in its scope of coverage the City of Tacoma damage claims for loss arising out of Contractor's work with limits not less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) aggregate.

This policy shall include Environmental Resource Damage coverage and Hazardous Substance Removal. If such coverage is provided on a "claims-made" basis, the following additional conditions must be met:

4.7.1 The policy must contain no retroactive date, or the retroactive date must precede the commencement date of this Contract.

4.7.2 The extended reporting period (tail) must be purchased to cover a minimum of Six (6) years beyond completion of work.



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4.8 Other Insurance

Other insurance may be deemed appropriate to cover risks and exposures related to the scope of work or changes to the scope of work required by City of Tacoma. The costs of such necessary and appropriate Insurance coverage shall be borne by Contractor.